

## **Research**

- **How successful are Welsh Higher Education Institutions in securing research income from all sources?**

A report by Professor Robin Williams for the Learned Society of Wales (*Recognising the Quality of Research at Universities in Wales*) found that Higher Education Institutions in Wales earn grants for research from a variety of sources such as the UK Research Councils, the Technology Strategy Board, European Framework programmes, charities and industry. They also earn grants from the NHS in Wales and from European Structural funds. In terms of total grants Wales's share of the UK total in 2010-11 was 3.8%.

Wales is relatively good at attracting research council funding from the Arts and Humanities Research Council, Economic and Social Science Research Council and Biotechnology & Biological Sciences Research Council. Indeed, HESA data indicates that in 2010/11 the Welsh HE sector's share of research grant income from all three of these Research Councils - AHRC, BBSRC and ESRC - exceeded the Welsh Government's target of 5% of the UK total.

The Report noted that close to one third of UK Research Council grants are awarded to the Golden Triangle research universities and when this is taken into account Wales's share increases to 5.0% of the reduced UK total. It was suggested that it is sometimes useful to consider statistics with and without the inclusion of the Golden Triangle universities.

The Report acknowledges though that the Welsh fraction is low as a total and the Report felt that there were a number of reasons for this:

- The success rate of applications to the Research Councils from Wales is not dissimilar from the other nations suggesting that the quality of proposals is not lacking, but that the shortfall follows from the volume of submissions and the amount of funding requested per application. Universities in Wales have initiated action to improve the quality and quantity of research grant applications and to build capacity for larger funding bids.
- The funding from the Welsh Government, allocated by HEFCW to universities as a recurrent grant for research (the QR funding), is critical in that it supports the 'well found' base of researchers and infrastructure which is essential in order to bid realistically and successfully for such highly competitive project funds. Scotland's fraction of QR within the UK is 12.3%, even though their population share is only 8.4%. Coupled with their strengths in high earning areas, such as the many Medical Research Council Research Centres, it is no surprise that they perform so well in terms of Research Council grant income. The Welsh QR fraction of the UK is 4% compared with 4.9% population share.

- The relatively low level of competitive Research Council grants earned by universities in Wales reflects the historical subject mix and relatively low numbers of academic staff in Wales in medicine, engineering and the physical sciences, all of which draw funding from the higher spending Research Councils.

Despite the comparative low levels of RCUK income, Wales's internationally recognised research has risen over the last decade and now makes a significant contribution to the UK's world-leading research base. This is evidenced in recent internationally recognised bibliometric assessments of Wales' comparative standing (DBIS Report 2011). According to Thomson Reuters over the past decade research in Wales is now recognised in the top 20 research countries in the world – it was below the World, OECD and EU averages only a decade ago.

- **Which factors lead to some Welsh HEIs receiving more research funding than others?**

The Welsh Higher Education sector, like other members of the UK, comprises a diverse range of universities with different missions and discipline mix which determine the extent of research intensity. Some institutions are more research intensive than others and as a result will receive more research funding. Research intensive institutions will have the infrastructure and the staffing complement to enable them to undertake cutting edge research, to bid successfully for research funding, to collaborate with other high profile research intensive institutions, and to be successful in national Research Excellence assessments. All of this, in turn, engenders further success in obtaining research funding. In awarding competitive research contracts, the Research Councils and other such external funders are looking for evidence of a successful track record, critical mass of excellent talent and a thriving, well-found research environment to derive best value from their investment and to ensure sustainability of the research area. This both creates and requires concentration and explains why not all universities can be research-intensive.

- **How can Welsh HEIs improve their performance to meet the Welsh Government's ambition that they receive at least 5% of UK Research Council funding?**

The report by Professor Robin Williams for the Learned Society of Wales (*Recognising the Quality of Research at Universities in Wales*) concluded that the relatively low level of competitive Research Council grants earned by universities in Wales reflects the historical subject mix and relatively low numbers of academic staff in Wales in medicine, engineering and the physical sciences, all of which draw funding from the higher spending Research Councils. The Report noted, however, that in terms of contributions to the economy and the community the annual HEBCIS data shows that universities in Wales continue to outperform the UK in many areas, including the formation of spinout companies and business start-ups.

It needs to be acknowledged that only a few of the HEIs in Wales have the capacity and ability to improve significantly their performance in winning UK Research Council funding. At £26.5M in 2011/12 Cardiff University accounted for more than 50% of the Research Council funding received by Welsh institutions (Swansea received £9.5M, Aberystwyth £9M and Bangor £5M). Increased selectivity in terms of the HEFCW research funding that is available would help those institutions with the ability to focus on excellence, enabling these universities to invest in the well-found base from which to secure competitive research project funding.

Those Welsh HEIs with the ability and capacity to improve their performance could do so by:

- Building capacity through the recruitment, development and retention of high quality staff and students;
- Developing high quality collaborations with other HEIs with a track record in securing research funding (both within Wales and outside of Wales) and with business and industry;
- Engaging more effectively with the Research Councils;
- Improving the quality and increasing the scale of bids for funding to the Research Councils.

The Welsh Government's Sêr Cymru initiative is a welcome investment in raising the Welsh HE sector's ability to compete on a world stage. If universities in Wales are to consistently secure 5% of RCUK funding and deliver a world class research system there will need to be a continued and greater investment in research capacity. One way of increasing the research capacity is to support the growth of a sustainable and vibrant postgraduate system in the sector. Funding a sustainable system for attracting and funding postgraduates should be seen as part of a holistic research strategy for universities and the sector if Wales is to maintain and grow its research impact.

- **In which areas do Welsh HEIs successfully collaborate to bid for research funding, and how could improvements be made in other areas where greater collaboration is required to increase research income?**

Welsh HEIs already successfully collaborate across a range of areas to bid for research funding. Examples of successful collaborative research projects that have been funded from HEFCW's Reconfiguration and Collaboration fund include: Wales Institute of Social and Economic Research, Data and Methods (WISERD), Low Carbon Research Institute (LCRI) and Wales Institute of Mathematical and Computational Sciences (WIMCS).

Cardiff University led on the major awards for DECIPHer and now DECIPHer II (Centre for the Development and Evaluation of Complex Interventions for Public Health Improvements) with partners in Swansea and Bristol, bidding to funding consortia led by the ERSC.

Another successful collaboration is the SPECIFIC project (<http://www.specific.eu.com/>). This is an academic and industrial consortium led by Swansea University with Tata Steel as the main industrial partner. This is funded to the level of M£9.5 by EPSRC, Technology Strategy Board and the Welsh Government, with Cardiff University's School of Architecture as a key academic partner. This major external funding builds on work carried out under the collaborative, HEFCW and WEFO funded and Cardiff-led Low Carbon Research Institute (LCRI). LCRI's research funding portfolio now exceeds £80 million from RCUK, ERDF/ESF and government and EU competitive research funds.

Sêr Cymru is also building significant collaborations across the Welsh HE institutions in areas supported by the Welsh Government.

The recent GW4 (Great Western Four) collaboration, which brings Cardiff together with the Universities of Bath, Bristol and Exeter will help build research mass,

advance the student experience and internationally will help put Cardiff University and Wales firmly on the world map.

International collaborations (Europe and further afield) are also vital for research-intensive universities. Such collaborations will also help the Welsh Government's ambitions of having a Welsh University placed in the Top 100 world universities as evidence shows that research output is more likely to gain higher visibility if it is co-authored with an academic from an overseas institution. It needs to be recognised that greater encouragement of research collaborations on the basis of excellence irrespective of region will ultimately bring most benefit to Wales.

### ***Tuition Fee Income and Support***

- **What has been the financial effect of the new tuition fee policy, introduced in the 2012/13 academic year, which allows HEIs to charge students up to £9,000 per annum for HE courses? What future financial effect is this policy likely to have?**

As the direct recurrent HEFCW funding to Institutions has decreased to cover the costs of the Tuition Fee Grant, institutions have seen an immediate dip in funding in 2012/13 whilst students funded under the old regime progress through the system. For students funded under the old fee regime, institutions have received reduced (for expensive and priority subjects) or no HEFCW funding, with the lower old fee of £3,465 which is substantially less than they would have received in previous years. For example, between 2011/12 and 2012/13, HEFCW plus fee income associated with old fee regime students fell by between 14-51% for STEM subjects, and between 13-52% for non-STEM disciplines; only the very high costs subjects saw no fall in income associated with these continuing students.

HEFCW's modelling of funding to all Welsh institutions assumed a sector increase in funding of 1.6% once new tuition fee income was taken into account, estimated on the basis of achieving maximum numbers in the student number cap. However, the majority of Welsh institutions saw a decline in numbers accepting a place for 2012-13. The UCAS End of Cycle report for 2012 showed that the number of acceptances to Welsh institutions fell by 8.1 per cent due primarily to a 17% decline in acceptances from English students. Also a greater proportion of 18 year olds in Wales applied to institutions outside Wales than to institutions within Wales for the first time since 2004. If this trend continued it would be very worrying for the Welsh HE sector with major implications for the Welsh tuition fee grant budget.

This financial situation leads to obvious tensions - new entry students are paying substantially more in fees and rightly expect more for their money while institutions are, at least in the short term, having to manage with less.

It is estimated that in 2013/14 funding will begin to increase to previous levels as the students paying the new fee levels progress through the system and by 2015/16, when the majority of students will be paying the higher fees, funding received by institutions will rise as long as student recruitment can be maintained or increased to reverse any shortfalls from 2012 entry.

It is also important to note that the projected increase in income to HE Institutions presented in Chart 1 of the recent Welsh Government Policy Statement on Higher Education is based on a number of assumptions which are by no means certain:

- That the Welsh Government allocation to HEFCW for 2014/15 will be ca.£180million;
  - That the Welsh Government allocation to HEFCW will be flatlined from 2015-16 at ca. £160million;
  - That tuition fees will increase with inflation (not currently permitted by Government);
  - That current levels of cross-border flows and student recruitment continues at current levels.
- **Does the new tuition fee policy create a greater or lesser level of financial uncertainty for HEIs?**

As seen above, there is less certainty as institutions become more subject to market forces. A number of factors are contributing to this uncertainty - the new fee regime has created changing patterns of student behaviour; the introduction of new student number controls in England, designed to promote competition between institutions; this leads to increased competition from English universities and from private providers entering the market, particularly given the significant under-recruitment of many English universities in 2012. At the same time in demographic terms, there are decreasing numbers of 18 year olds over the next few years which will have an impact on university entrants coupled with falling numbers of mature students applying to universities. In addition, there are rising student expectations when paying higher fees. There could also be a potential negative effect of rising graduate debt on postgraduate recruitment in longer term, which could lead to loss of income to Institutions and as well as loss of higher-level skills to the workforce.

- **What has been, and is likely to be in the future, the financial implications of the Welsh Government's tuition fee grant?**

It is questionable whether the Welsh Government's tuition fee grant policy is sustainable in the medium to long term – especially since students are subsidised to study anywhere in the UK. As detailed below, the policy is effectively funding English universities. Also, the Welsh Government has no jurisdiction over the number of Welsh students recruited by English institutions so there is no effective way for the Welsh Government to control the budget for the tuition fee grant.

Longer-term, Wales may feel the impact of its policy of making the tuition fee grant available to Welsh students studying elsewhere in the UK by not reaping the economic and societal benefits of these graduates entering the Welsh workforce. There is evidence to show that graduates tend to seek employment near to their place of university study.

- **Does the current funding regime provide effective financial support to students from the lowest income households and is this the most cost effective way of financially supporting this cohort of students?**

The two main elements of student finance are funding for tuition fees (part grant and part loan) and funding for living costs (part grant and part loan depending on household income). This funding goes alongside academic choices and can mean the difference between a student applying for a place or not. Students see the fees and living costs as part of a package of funding which adds up to enable them to enrol on a degree course. The Student Support Service at Cardiff University has seen how the Tuition Fee Loan and Maintenance Loan are effective in helping those

from lower income backgrounds but only in conjunction with the Tuition Fee Grant (TFG) and Assembly Learning Grant (ALG).

The ALG is effective in encouraging those from traditionally debt averse/lower income backgrounds (including care leavers and disabled students) to consider university. The ALG encourages these students, some may also be parents, who want to qualify for a better future for themselves and their family. There are additional elements available (e.g. childcare grants, dependents' grants and parents' learning allowance) which also add up to make higher education a practical and more affordable option for low income students. These targeted grants, however, alongside the Assembly Learning Grant do encourage students to apply to university. As childcare grants are only offered to those on very low incomes and can only provide 85% (up to an allowable maximum), the Financial Contingency Fund is invaluable in helping with any shortfall. Experience has shown that there is much less parental anxiety about finances from Welsh families in the lower income bracket than their English counterparts and more worried parents ring for advice compared to Welsh parents. The ALG also means that students from lower income backgrounds are able to manage financially and applications to hardship fund applications are decreasing from these students.

In terms of the TFG, the Student Support Service know from their experience of dealing with thousands of students and their parents/guardians that it is a strong incentive to those from lower income families. When higher fees were introduced there were elevated levels of anxiety among pre-entry students and their parents. Reassurances could be given that none had to be paid upfront but those who are Welsh domiciled had a message which removed many doubts. Thus the effect of the TFG policy on Welsh students and families has been very positive. The TFG helps low income families but is also beneficial for students from middle class backgrounds who are suffering from hardship as parents are unable to give them the expected contribution and who are income assessed out of grants. However, as referred to above, it may not be sustainable to keep it at the same level of availability.

- **What are the financial implications for Wales of subsidising Welsh students who study in HEIs outside of Wales?**

Whilst it was understandable that the Welsh Government wished to protect Welsh domiciled students from increasing tuition fees, an unfortunate by-product of the policy is that the Welsh Government is effectively funding English universities. An increasing fee subsidy budget will ultimately mean less funding for other aspects of higher education in Wales such as research, postgraduate studies and innovation. We fear that in the long term the competitiveness of higher education in Wales may be at risk.

We have estimated that, by 2015/16, up to £94.5M of Welsh Government money will be flowing into English institutions per annum as a result of the current tuition fee policy. We would urge the Welsh Government, in partnership with the sector, to review the policy on student finance at the earliest possible opportunity and would recommend consideration of the introduction of a policy such as that adopted in Scotland whereby Welsh domiciled students would be supported only if they study in Wales. A change in policy along these lines would ensure that both Welsh students and Welsh institutions are protected as the funding currently flowing into English institutions could be used instead to ensure the sustainability of higher education in Wales, and encourage retention of Welsh talent within Wales.

- **What are the financial implications of more expensive subjects (e.g. medicine and engineering) being funded under the new tuition fee regime given that some courses may cost in excess of the maximum £9,000 per annum for HEIs to deliver?**

The importance of Science, Technology, Engineering and Maths (STEM) graduates in society has long been recognised in terms of the benefits that these disciplines bring to the economy, standard of living and well-being. The current HEFCW funding model means that those institutions that offer courses predominantly in the lower-cost subject areas will benefit more from the increased fee income than those who offer more higher-cost STEM subjects. Institutions with more expensive subjects will be dependent on continued government funding for teaching to sustain excellent provision in the higher-cost and priority subject areas. Without adequate funding for these expensive areas, HEIs will not be able to afford to run these courses and Wales cannot afford to lose its STEM students and graduates. A strategy for the sustainable provision of these subjects is therefore vital as any damage from cuts in funding will not be easily reversed.

The cost of teaching Medicine and Dentistry far exceeds the maximum new higher fee of £9,000 per annum (it is estimated that the true cost of teaching Medicine and Dentistry amounts to around £18,000 -£19,000 per full time student per annum) and without sustained and adequate public funding both the Medical and the Dental School will quickly cease to be viable. Wales certainly cannot afford to lose its only Schools of Medicine and Dentistry and associated healthcare students and graduates – the adverse impact on healthcare in Wales would be significant. It is vital therefore that there is an explicit commitment to sustaining funding for these very high cost subjects in future years to ensure continued provision in these areas.

- **How important is the income stream to Welsh HEIs from tuition fees received from students domiciled outside Wales including the rest of the UK, European students and overseas students?**

Whilst the income stream from tuition fees received from students domiciled outside of Wales is important to Welsh HEIs, it is also extremely important to Wales. The Oxford Economics Report (2011) found that, in total, Wales' international and EU students contributed £237 million to Wales' GDP. This is equivalent to 0.5% of the Welsh economy – a larger share than agriculture, and on a par with Cardiff's hotel and restaurant sector – and supported 9,230 jobs in Wales.

In the 2009/10 academic year, 19,050 students from outside the UK studied at universities in Wales. While studying, these students contributed to both the Welsh and UK economies through the fees they paid for tuition, their spending on day-to-day items, and the spending of their friends and family visiting Wales whilst they were studying. The report estimated that:

- The 19,050 international and EU students studying in Wales in 2009/10 paid £110 million in university tuition fees in 2009/10. This generated a value-added contribution of almost £140 million to Wales's economy, and a further £20 million contribution to the rest of the UK economy.
- International and EU students spent almost £130 million on living costs in 2009/10. This spending led to a value-added contribution of £79 million to Wales's GDP, and a further £32 million to the rest of the UK economy.

- Visiting friends and family spent £23 million while in Wales, generating £20 million of value-added for the Welsh economy. The rest of the UK benefited from these visitors to the tune of a £5.4 million contribution to GDP.

It was also found that the contribution of international and EU students did not end when they completed their studies. International and EU alumni can and do continue to make important contributions to the Welsh economy through a variety of channels.

### ***Other Income and Financial Issues***

- **What opportunities do Welsh HEIs have to increase income from recruiting additional students?**

There are some limited opportunities to increase income from recruiting additional students as long as the fee cap is not exceeded. Welsh institutions can recruit additional rest of UK, international (not EU) and postgraduate students without impacting on the student support budget. However, there are limits in terms of capacity, quality and competition as well as issues with a likely downward trend in demand in respect of Postgraduate Taught provision as a result of increased undergraduate fees (referred to above).

- **What progress is being made in relation to the Welsh Government's Programme for Government indicator that 'at least 75% of Welsh HEIs will have an annual income in excess of the UK median', and how can this be improved in the future?**

HEFCW will be able to comment on progress against this target.