THE DAVID HUME INSTITUTE



Higher Education in Scotland: a critical topic

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Contents	Page
Foreword – Alice Brown and Jeremy Peat	
The Authors	
I The Economists' View	
The Muddle over Tuition Fees – <i>Gavin McCrone</i> Scottish Universities – Uncertain Future? – <i>David Bell</i>	1 7
II Some Thoughts from Principals	
Some Challenges for Higher Education – <i>Ian Diamond</i> The Future Funding of Scottish Universities: Heading down the	13
Rocky Road – James Fraser Universities Shills and Maximizing Social Opportunity Auton Musertalli	19
Universities, Skills and Maximising Social Opportunity - <i>Anton Muscatelli</i> Funding and Purpose: Thinking Beyond the Gap – <i>Joan Stringer</i>	25 31
III Comments from Informed Parties	
A Distinctively Scottish Solution? - <i>Anthony P. Cohen</i> How can Scotland take best advantage of the resource of part-time learners and ensure equity in funding arrangements between full and part-time	39
students? - Andrew Cubie	45
How did it come to this – and what are we going to do about it?	4.0
- Jim Gallagher The Enture of Higher Education in Sectland, its funding and links with	49
The Future of Higher Education in Scotland, its funding and links with Business - <i>Iain McMillan</i>	57
Back to Basics - Chris Masters	61
The Future of the Scottish Universities - Andrew Miller	65
Universities and Government - Stewart Sutherland	71
IV The View from Outside Scotland	
Time for a Scottish Solution? - Frances Cairneross	79
Oiling the wheels - Alan Langlands	83
Talking to the neighbours - <i>Teresa Rees</i>	91

The David Hume Institute is most grateful to the Goodison Group in Scotland for providing financial support for the publication of these essays. We very much hope that the essays will prove valuable in the context of the "Learners in Tomorrow's Scotland; our Vital Resource" project that Goodison is implementing in conjunction with Scotland's Futures Forum. We also hope to co-operate further with both Goodison and the SFF in the months and years ahead.

FOREWORD by Professor Alice Brown and Jeremy Peat

Introduction

The role of the David Hume Institute is essentially to stimulate informed, objective and evidence-based inputs into the policy debate – starting in the tradition of Hume from a sceptical perspective. Given this context it is wholly unsurprising that we have turned our attention in recent years to the subject of higher education. We were privileged that Frances Cairneross, one of our Honorary Vice Presidents, delivered the Hume Annual lecture on this topic on 2009. We then organised a major seminar in the autumn of 2010, including Sir Andrew Cubie and Professor Neil Shephard as key speakers and with Frances Cairneross in the chair. That event involved a significant number of University Principals and virtually all the key players engaged with the policy debate.

This collection of essays is effectively a follow up to that seminar, after all that has happened between then and now. The genesis of the collection was a discussion with the David Hume Trustees in early April. It was following that meeting that we wrote to Principals past and present, to commentators from outwith as well as within Scotland, to key economic analysts of the sector and to a range of informed parties, seeking contributions. The response was overwhelmingly positive and resulted in the sixteen excellent essays contained within this volume.

We have put together this volume accepting that the context has changed in recent months, but still wishing to stimulate "informed, objective and evidence-based" debate. We should stress at the outset that this is certainly not all about fees. On the contrary, the subject matter covered in the essays is rightly broad.

There is no doubt that higher education is of major importance to Scotland in terms of teaching, research and its contribution to the economy. Indeed, it is recognised that the sector has consistently "punched above its weight" internationally in terms of its teaching and research. Yet, there is growing concern that higher education in Scotland needs reform and is at risk as a result of the changes to funding in England and other parts of the UK as well as growing competition from overseas. It was in order to explore these issues that the David Hume Institute organised the seminar in the autumn of 2010. The broad range of people who attended that event were interested in sharing their expertise and participating in the debate.

More recently, higher education featured as one of the key topics in the campaign leading up to the elections for the Scottish Parliament on 5 May 2011. All of the main political parties in Scotland, with the exception of the Conservatives, made it clear in their respective manifestos that, if elected, they did not intend to charge fees or to introduce a graduate tax for students. Following the election, Scotland now has a majority SNP Government which has stated that "educational opportunity should be based on ability to learn and not ability to pay". However, the difficult question of the future of higher education in Scotland still remains as do problems associated with resourcing and addressing the funding gap between Scotland and other parts of the UK.

¹ Scottish National Party, SNP Manifesto 2011, Re-elect A Scottish Government Working for Scotland, April 2011, page 25.

Immediately after the SNP"s election victory, the First Minister, Alex Salmond, made it clear that he and his government did not have a "monopoly of wisdom" and would be keen to work with others in taking forward public policy in Scotland. The David Hume Institute offers this collection in that spirit and as an objective and positive contribution to the debate.

Background

Higher education has been subject to many major reviews in the post-war period, including the Robbins Report of 1967, which led to the creation of the "new" universities, and the Dearing Report of 1997 which re-defined the purpose of higher education. During that time the percentage of people who went to university in Scotland rose from around 3 per cent after the Second World War to as high as 50 per cent in recent years; and the number of institutions increased from four to fifteen.

Post-devolution there has been growing divergence in higher education policy in different parts of the UK and it was a topic that exercised MSPs who were newly elected to the Scottish Parliament when it was established in 1999. Student finance proved to be one of the first challenges that faced the first Labour/Liberal Democrat Coalition Government in 1999. At that time the Government set up the Cubic Committee which was asked to consider the matter and report². The administration responded by introducing a graduate endowment tax.

The SNP formed a minority government following the 2007 parliamentary elections in Scotland, and abolished the fixed graduate endowment fee the following year. Since that time, full-time Scottish and non-UK EU students have not been required to contribute towards the cost of their higher education. The latter are entitled to the same access to financial support towards the cost of their tuition as students from Scotland. This exemption does not apply, however, to students from other parts of the UK.

The debate over the future of higher education continued through the work of the Joint Future Thinking Taskforce on Universities and through the publication of the Scottish Government's Green Paper in 2010.³ In addition, a report of an expert working group on the size of the funding gap faced by Scottish higher education was published in 2011.⁴

At the same time, there have been different approaches to student contributions in England, Wales and Northern Ireland.

For example, the Conservative/Liberal Democrat Coalition Government at the UK level did not accept all of the recommendations of the Browne Report⁵ but has sanctioned a rise in the cap on variable tuition fees that English higher education institutions can charge from £3,000 to a maximum of £9,000.

² The Report of the Independent Committee of Inquiry into Student Finance, (The Cubic Committee), Scottish Executive Publication, 21 December 1999.

³ New Horizons: Responding to the challenges of the 21st century, The Report of the Joint Future Thinking Taskforce on Universities, Scottish Government publication, November 2008; Building a Smarter future: Towards a Sustainable Scottish Solution for the Future of Higher Education, Scottish Government Green Paper, December 2010.

⁴ Report of the Scottish Government: Universities Scotland Technical Group on Higher Education, Scottish Government Publication, 28 February 2011.

⁵ Securing a Sustainable Future for Higher Education, An Independent Review of Higher Education Funding and Student Finance, (The Browne Report), 12 October 2010.

This policy has caused considerable embarrassment for the Liberal Democrats, and in particular their leader Nick Clegg, because of their pre-election pledge not to charge tuition fees.

There is no doubt that this experience had an impact on the policies adopted by the different political parties in Scotland in the recent Scottish parliamentary elections. Few were keen to put forward a policy that may not be popular with the electorate. The funding of undergraduate education is, therefore, politically sensitive north and south of the border.

But there is a danger that the focus on a graduate contribution and funding gaps could divert attention from more fundamental concerns about the role of universities in modern society and how Scottish institutions can compete in an increasingly competitive global market-place. As Alan Langlands puts it: "The danger is that talk of fee waivers, funding gaps and future teaching funding policy will divert attention from the bigger picture – the global context in which we are operating, the principles that underpin the work of universities, and the need to keep building for the future".

As stated earlier this is not all about fees. We very much hope that the essays in this collection go some way to address the bigger picture and to consider ways in which we can work towards a Scottish solution to the challenges facing the higher education sector.

The Essays: Issues and Proposals

The different essays address a number of key areas of concern as well as positive proposals for change. They can be summarised under the following headings:

1. Key Issues:

Current economic conditions and budgetary constraints

Many of the contributions refer to the impact of current economic conditions on the higher education sector and the fact that there will be severe budgetary constraints in the years to come. In addition to the over-arching budget constraint, David Bell points out that spending on colleges and universities in Scotland has been declining relative to other spending priorities in the last decade. He further notes that participation rates for those in higher education has been falling in recent years; and that Scotland has a poorer record than other parts of the UK in attracting those from lower socio-economic backgrounds. Similar issues are raised by Jim Gallagher who questions whether Scotland can afford to continue with a policy of free higher education as well as free personal care, prescriptions, bus travel etc. and whether this is the most effective approach to decreasing inequality and widening access. (This could be a topic on its own for another set of essays!) The potential impact on other areas of policy of maintaining free higher education is explored by Gavin McCrone and others – opportunity costs must be rising fast as the budget constraint bites more deeply.

Funding Gap between English and Scottish institutions

There has been much debate about the size of the funding gap between English and Scottish institutions and the potential impact on the competitive position of Scottish universities. This is explored in a number of the essays (see, for example, Cairncross, Fraser, Langlands, McCrone, McMillan, Miller, Stringer, Sutherland).

The new Scottish Government has made a commitment to bridge the gap but there are disputes about the size of the gap, ranging from £93m to £300m (and potentially even higher given the evolution of plans for fees to be charged in English universities), and concerns about whether this approach is feasible in the long-term. Frances Cairncross raises concerns that "Scotland and England have both made unattainable promises about the funding of university education".

Devolution and its impact on higher education policy in the UK

The difference between the funding of English and Scottish institutions is just one part of the picture. Teresa Rees (the Cubie of Wales if you wish) draws on her experience of chairing two inquiries for the Welsh Assembly Government"s Minister for Education. She explains the policy adopted in Wales and the way in which policy decisions made by one democratically elected body in the UK can have an effect on the others and on cross border flows of students. She asks whether it is time for "a new, mature phase of devolution, that means that in addition to England and the devolved nations developing their own policies on fees, student support and international matters, for each country, some attention is paid to an overall UK strategy to benefit all".

English vs. Scottish and other European students – who pays and who does not?

One of the anomalies of the different structures operating within the context of European law is that while Scottish and non-UK EU students do not pay fees, students from other parts of the UK have to do so. Further, James Fraser demonstrates the impact of different fee policy in England and Scotland on the first year enrolment of EU students where for the years between 2005-2006 and 2008-2009, the enrolment in England rose by just over 9 per cent compared to 27 per cent in Scotland: "As a consequence, the equivalent of one Scottish university is entirely populated with non-UK EU students and the Scottish Government pays the teaching cost of their education in its entirety". It is recognised by authors who address this issue that it is not an easy anomaly to resolve – and looking forward, that one university could become two!

2. Towards a Scottish Solution

It is good to be able to report that our authors look for solutions as well as clarifying the problems. Moving on from recording some of the issues of concern, the contributors put forward positive ideas for debate, the most fundamental of which are raised by Cohen, Gallagher, Langlands, Stringer and Sutherland, namely what are universities for and what should their appropriate relationship with the state be? They attempt to move away from disputes about funding and fees by looking at the big picture and taking a more strategic approach. For example, Joan Stringer asks: "Is it possible to take a different approach to analysing the needs of Scottish higher education? … The starting point would be to achieve greater clarity (if not agreement) about the purpose of higher education in modern Scotland".

The role of universities and their relationship with the state

Stewart Sutherland suggests that "what is needed is a radical re-appraisal of the relationship between Government and universities" and that this relationship "should move to a contractual basis". Under this new relationship, "Governments should set out what they and the taxpayers might reasonably expect of universities". He goes on to explain how this new relationship could be developed in practice and the potential benefits of this approach.

The need to change the relationship between the Government and the universities is also discussed by Joan Stringer and Anthony Cohen. In his essay, Anthony Cohen explores some of the contradictions in the current system before making the case for stratification of the sector, much greater collaboration, and changes to the funding and governance arrangements.

Other Proposed Reforms

There are numerous related and other practical ideas for reform advanced in this collection of essays.

Jim Gallagher offers "eight potential elements of a solution" which include initiating a swift and decisive debate about what sort of higher education sector we want and how we can afford to pay for it. He recommends that we should not rob research funding to support teaching, and that we should look at student support in the round; reduce the cost to students of taking many degrees; differentiate the sector more, not less; be prepared to pay more for the best; concentrate support on Scottish students; and introduce a new Student Support Trust.

Frances Cairncross offers a specific way in which the new Scottish Government could rescue Scotland"s universities without breaking its word on tuition fees. This would involve keeping in place the teaching grant, introducing a version of the English system but calling it a capped graduate tax instead of deferred fees, and then topping up the teaching grant with a voucher.

Chris Masters argues that the fundamental purpose of a university is: "The creation of knowledge through research and scholarship and the transfer of knowledge through teaching and publication" and that what is required is an equality of esteem between research and teaching; greater diversity of mission between the various higher education institutions; and a pooling of resources, both in teaching and support functions.

Iain McMillan reminds us that "high quality education and skills are essential in developing the future economic capacity of our country" and puts forward proposals including a Scottish Funding Council Horizon fund, the need for more sharing of services and collaboration, greater flexibility and consideration of some courses being taught over two years instead of four.

The idea of shorter degree courses is also advanced by James Fraser and the possibility that the "typical Scots graduate might take one year less than at the present time to make the progress from being a 5-year-old at the start of compulsory education to becoming an honours university graduate". Under such a scheme the Scottish Government could guarantee free education for Scots for a period of 18 years, but expect some kind of contribution from those who take more than this length of time.

Andrew Miller asks whether degree courses could be shortened and discusses issues such as distance learning, the length of vacations, the possibility of greater efficiency through curtailing "back office" services and the potential for greater commercialisation and even privatisation.

Clearly there are significant savings to be made via more efficient delivery of support services (including pooling) and thinking carefully about (at the least) co-operation between institutions as suggested by Anthony Cohen.

Such cost savings would not be the salvation of the sector but could make an important contribution to enhanced cost-effectiveness of delivery; lower costs for delivering a product undiminished in terms of teaching and research quality and output must be in everyone"s interest.

Ian Diamond makes the case and puts forward suggestions for developing an enhanced student experience, improving the research focus of our higher education institutions and moving towards greater partnership and "for Scotland to work as a nation rather than solely as a series of competitive institutions".

Anton Muscatelli reminds us that universities are essential to providing the skills for a country's future prosperity and that they have the potential too to transform lives, provide opportunities and drive social mobility. He argues that: "If we are convinced that these opportunities should accrue to all parts of society, then we need to think seriously about how to achieve that next step in our efforts to widen access to Higher Education".

Extending the theme of access, Andrew Cubie addresses the specific issue of part-time learners and asks: "How can Scotland take best advantage of the resource of part-time learners and ensure equity in funding arrangements between full and part-time students?" He is of the view that: "The Scottish Government needs to look beyond simply the needs of young people in full-time higher education and grasp the thistle of ensuring our universities meet the requirements of all students".

Taken together there are no shortages of ideas about how to address some of the challenges facing the sector and improve the role and impact of higher education in Scotland and internationally. So many ideas; so crucial a topic; so much to debate.

Conclusion

We echo the points made by many of the contributors to this collection of essays and support the view articulated by Alan Langlands that: "The outcome of the Scottish election and the clarity of the SNP Government"s position suggest that there is no point in holding a sterile policy debate about tuition fees, a graduate tax or other approaches to student co-funding in Scotland. The focus now is on finding a distinctive Scottish solution which is both deliverable and sustainable given the short and medium term constraints on public spending and other spending pressures, particularly in schools and the NHS".

In her essay, Joan Stringer argues: "In Scotland, we need to have the debate we have not yet had and we need to develop a national consensus about the purpose and limits of State involvement in funding, supporting and controlling the delivery of higher education". We very much endorse this sentiment.

It is necessary to stress that as a charitable and non-partisan body the David Hume Institute and its Trustees have no view on the issues addressed in these essays or indeed in this foreword. We see the need for objective, informed and evidence-based debate; and we hope that these essays will go some way to stimulating such a debate and to finding the distinctive Scottish solution that is required.

The Authors

Professor David Bell M.A., M.Sc., Ph.D. is currently Professor of Economics at Stirling University. He is a Budget Advisor to the Finance Committee of the Scottish Parliament and is co-director of Scotecon - the Scottish Economic Policy Network. He has lectured at both Glasgow and St Andrew's Universities and was a member of the Independent Expert Group advising the Calman Commission on Scottish Devolution.

Professor Alice Brown CBE, FRSE, FRSA, AcSS, Cipfa (Hon): Emeritus Professor of Politics, and formerly Vice Principal, University of Edinburgh. Also Co-Director of the University's Institute of Governance. Scottish Public Services Ombudsman from 2002-2009. Currently member of the Administrative Justice and Tribunals Council; Sunningdale Fellow; Chair of the Lay Advisory Group of the Royal College of Physicians of Edinburgh, Deputy Chair of the RSE's Working Group on Women in Science, Technology, Engineering and Maths (STEM); Member of The Institute for Advanced Studies in the Humanities, University of Edinburgh; and Strategic Advisor to Hays.

Frances Cairncross CBE is the head of Exeter College, Oxford, and has been a journalist for many years, mainly on The Guardian and on The Economist. She was educated at Laurel Bank School, Glasgow and has an Honorary Degree from Glasgow University.

Professor Anthony Cohen CBE, BA (Hons), MSo.Sc, PhD, Hon.DSc (Edin), is Honorary Professor of Social Anthropology at the University of Edinburgh. He was the founding Principal & Vice-Chancellor of Queen Margaret University, Edinburgh, retiring in 2009. Previously, he was Professor of Social Anthropology at the University of Edinburgh from 1989-2003; and served as the University's Provost of Law & Social Sciences and as Dean of Social Sciences from 1997–2002. Professor Cohen is a Fellow of the Royal Society of Edinburgh and of the Royal Anthropological Institute, and holds an honorary D.Sc of the University of Edinburgh. He was awarded the CBE in the Queen's Birthday Honours List for 2008.

Sir Andrew Cubie CBE, FRSE is a consultant to the law firm, Fyfe Ireland LLP, and sits on a number of corporate boards as a non-executive director. Andrew has been engaged in education issues throughout his professional career, having been Chairman of Governors of George Watson's College, Chairman of the Court of Napier University and the Chairman of the Committee of University Chairmen for the UK. He was Convenor of the Independent Committee of Inquiry into Student Finance in Scotland ("the Cubie Committee") which brought about the abolition of tuition fees in Scotland. He is a former Chairman of the Confederation of British Industry in Scotland. He chairs the Scottish Credit and Qualifications Framework, the JNC of the Universities Superannuation Scheme and the Leadership Foundation for Higher Education. He also chairs Voluntary Service Overseas and is a deputy Chairman of the RNLI.

Ian Diamond is Principal and Vice Chancellor of the University of Aberdeen, a position he took up in 2010. Prior to this he was, from 2003, Chief Executive of the Economic and Social Research Council and, from 2004-2009 Chair of the Executive Group of RCUK. A Social Statistician who was formerly Professor of Social Statistics at the University of Southampton, Diamond has published over 100 papers on statistical methodology and applied areas such as higher education policy, population, health and environmental noise.

He is a Fellow of both the British Academy and the Royal Society of Edinburgh and an Academician of the Academy of Social Sciences.

James Fraser MA(Hons), M.Ed is the principal of the University of the Highlands and Islands. He has held senior management roles in Scottish universities for over 23 years including; Assistant Registrar at the University of Stirling and Secretary of Queen Margaret College. James was appointed as Secretary to Paisley College of Technology in 1989; Paisley was granted University status in 1992 and James remained as University Secretary until 2002 when he was appointed as Secretary of the UHI Millennium Institute. In January 2007 his post was redesignated as Deputy Principal-Secretary of UHI.

James has had the privilege of playing a leading role in the creation of three universities in Scotland – Queen Margaret College began this process, and Paisley College became the University of Paisley whilst James headed their administrations. In October 2009, James was appointed UHI Principal and in February 2011, he became Vice Chancellor of the University of the Highlands and Islands.

Professor Jim Gallagher CB, FRSE is visiting Professor of Government in Glasgow University and Gwylim Gibbon Fellow at Nuffield College, Oxford. He was Director General Devolution for the UK Government and served an advisor in No 10 to both Gordon Brown and Tony Blair. He also held a number of senior civil service posts in Scotland including head of the Scottish Justice Department.

Sir Alan Langlands FRSE is the Chief Executive of the Higher Education Funding Council for England responsible for promoting and funding high quality education and research in universities and colleges with higher education programmes. He was formerly the Principal and Vice Chancellor at the University of Dundee (2000-2009) and Chief Executive of the NHS in England (1994-2000). He has a particular interest in the scientific basis of health services and he chairs the boards of UK Biobank and the Health Foundation. He is also a coopted member of the Office for the Strategic Coordination of Health Research. Alan was knighted in 1998 for his services to the NHS; he is a Fellow of the Royal Society of Edinburgh and an Honorary Fellow of the Academy of Medical Sciences. He holds a number of honorary degrees and fellowships and has also been awarded honorary doctorates by the Universities of Dundee, Edinburgh and Glasgow.

Dr Chris Masters CBE, FRSE is currently the Senior Independent Director of John Wood Group PLC and of Alliance Trust PLC and Chairman and of the Festival City Theatres Trust in Edinburgh. He holds a number of other non-executive directorships including The Crown Agents and the Scottish Chamber Orchestra. He was previously Chief Executive of Christian Salvesen PLC, Executive Chairman of Aggreko plc and Chair of the Scottish Higher Education Funding Council. An industrial chemist by training, he has extensive experience of international business and is a fellow of the Royal Society of Edinburgh and a member of the Scottish Scientific Advisory Council.

Professor Gavin McCrone CB, FRSE started his career as a lecturer in economics at Glasgow University (1960-65) and was for five years a Fellow of Brasenose College, Oxford, before joining the Civil Service in 1970. He was head of the Industry Department for Scotland from 1980 to 1987, and the Scottish Development Department from 1987 to 1992, and Chief Economic Adviser to successive Secretaries of State for Scotland. From 1992 to 2005 he was a professor successively at Glasgow and Edinburgh Universities.

His published books and papers include *Housing Policy in Britain and Europe an Monetary Union and Regional Development*. He was Chairman of the Inquiry into the Professional Conditions of Service for Teachers in Scotland in 2000 and a member of the National Review of Resource Allocation for the National Health Service in Scotland. He was a member of the Parliamentary Boundary Commission for Scotland. He is a former Vice President and General Secretary of the Royal Society of Edinburgh and chaired the RSE's Inquiry into the Future for Scotland's Hills and Islands. He was awarded the CB and elected a Fellow of the Royal Society of Edinburgh in 1982, awarded an Honorary LLD from Glasgow University in 1986 and Honorary Fellowship of the Royal Scottish Geographical Society in 1993.

Iain McMillan CBE is the Director of CBI Scotland following a twenty-three year career in banking and two years as CBI Scotland Assistant Director. He is also Chairman of the University of Strathclyde Business School"s Advisory Board, Chairman of the Industrial Mission Trust, Chairman of the Scottish North American Business Council, a Trustee of the Teaching Awards Trust and a Trustee of The Carnegie Trust for the Universities of Scotland. He has also served on a number of other private and public sector boards. In 2009, Iain was appointed by Her Majesty the Queen to be Honorary Air Commodore of 602 (City of Glasgow) Squadron, Royal Auxiliary Air Force. Iain was educated at Bearsden Academy and is a Fellow of the Chartered Institute of Bankers; Fellow of the Chartered Institute of Bankers in Scotland; Fellow of the Association of International Accountants; Companion of the Chartered Management Institute; Fellow of the Royal Society of Arts; and Fellow of the Scottish Qualifications Authority. In 2003, Iain was awarded the CBE for services to lifelong learning in Scotland.

Professor Andrew Miller is a biophysicist interested in the arrangement of molecules in biological fibres – muscle, collagen and keratin - with a view to understanding how these tissues function in animals, including humans. He has used synchrotron radiation sources and high flux beam nuclear reactors to get information for X-ray diffraction and neutron scattering studies respectively. He has published around 180 research papers. He was the founding Research Director at the European Synchrotron Radiation Facility in Grenoble, France from 1986-91 and Principal of the University of Stirling from 1994-2001. Previously he was a lecturer in Molecular Biophysics in Oxford University for 17 years then Professor of Biochemistry in Edinburgh University where he became Vice-Principal looking after Research, Computers and the Libraries. He was General Secretary of the Royal Society of Edinburgh and is an Honorary Fellow of Wolfson College, Oxford. Since 2004 he has been Secretary of the Carnegie Trust for the Universities of Scotland

Professor Anton Muscatelli is Principal and Vice-Chancellor of the University of Glasgow since 2009. An academic economist, he has held a variety of appointments at the University of Glasgow, including Daniel Jack Professor of Economics (1992-2007). He has held visiting appointments in a number of Universities in Europe and the USA, as well as the World Bank and the IMF. Prior to devolution he was on the Panel of Economic Advisers of the Secretary of State for Scotland (1998-2000), and has acted as a Special Adviser (since 1997) to the House of Commons Treasury Select Committee.

Jeremy Peat has been Director of the David Hume Institute since 2005. He is also a board member of Scottish Enterprise, a member of the Competition Commission, Chair of the BBC Pension Trust and an Honorary Professor at Heriot Watt University.

Previously he was Senior Economic Adviser at the Scottish Office from 1985 to 1993, Group Chief Economist at RBS from 1993 to 2005 and BBC National Governor and then Trustee for Scotland from 2005 to end 2010. He was a member and then Vice Chairman of the Scottish Higher Education Funding Council from 1999 to 2005. He holds Honorary Doctorates from the Universities of Aberdeen and Heriot Watt.

Professor Teresa Rees CBE AcSS is a Professor in the School of Social Sciences, Cardiff University, and currently on study leave, having served a six year term as Pro Vice Chancellor. Her research has focused on gender mainstreaming and the "knowledge economy". She has chaired two commissions of inquiry on higher education funding and student support for the Welsh Assembly Government. In September 2011, she will be the Leadership Foundation for Higher Education's new Associate Director for Wales.

Professor Dame Joan K Stringer, DBE, BA (Hons) CertEd PhD CCMI FRSA FRSE was appointed Principal and Vice Chancellor of Edinburgh Napier (then Napier) University in January 2003, the first woman to head a Scottish University. Her career began in 1980 as Lecturer in Public Administration at Robert Gordon University, thereafter promoted to Head of School of Public Administration and Law and in 1991, to Assistant Principal. In 1996, she became Principal and Vice Patron of Queen Margaret University College. Professor Dame Joan Stringer's contribution to higher education and public life has been recognised by her award in 2001 of a CBE for Services to Higher Education and an Hon D Litt from the University of Keele. Further recognition of her achievement was made in 2009 with her award of a DBE for Services to Local and National Higher Education

Lord Stewart Sutherland is a distinguished British scholar and public servant. He is former president of the Royal Society of Edinburgh. He was knighted in 1995, inducted into the Order of the Thistle in 2002, and raised to the peerage as Baron Sutherland of Houndwood in 2001. Lord. Sutherland has served as principal of the University of Edinburgh, as well as in a number of other academic posts, including vice-chancellor of the University of London and Professor of History and Philosophy and Religion at King's College, London. He is the author of numerous books and articles on philosophy and religion. He has also been active in a wide range of civic and educational affairs. He was formerly Her Majesty's Chief Inspector of Schools in England and a member of the Board of the Higher Education Funding Council for England and the British government's Council for Science and Technology, and he chaired the Royal Commission on Long Term Care for the Elderly. He holds an MA from Corpus Christi College, Cambridge, and an MA from the University of Aberdeen.

I The Economists' View

Gavin McCrone David Bell

The Muddle over Tuition Fees¹

Gavin McCrone

Anyone arriving in the UK from another country must find the confusion over proposed university tuition fees hard to credit. It is seldom that a Government policy seems so certain to be damaging and misguided, particularly in Scotland. In England, in response to a drastic cut in the government grant, universities are to be allowed to raise undergraduate tuition fees from their present level of £3,290 to a maximum of £9,000 a year and it now seems that the vast majority of them intend to set their fees at or near the maximum level. In Wales and in Northern Ireland tuition fees have also been £3,290. The Welsh Assembly Government earlier decided to set fees £2,000 below the average in England, which on the assumption that the average for English fees would be about £6,000 would have resulted in fees of £4,000; but now that English fees are to be substantially higher, the Welsh Assembly Government may want to reconsider. In Northern Ireland fees are expected to be £5,750 following the revised Stuart report, which had previously recommended no change.

In Scotland, however, the SNP Government, prior to the recent election, pledged to continue their policy of free undergraduate tuition and this pledge was then repeated for the lifetime of the new Parliament by the Labour and Liberal Democrat parties. As before, this means that undergraduate students from European Union countries will also have free tuition. English, Welsh and Northern Irish students on the other hand, who up to now have had to pay fees of £1,820 a year, are likely to be charged substantially more to help fund the universities, as will students from outside the EU. This has the bizarre consequence that while Northern Irish students would have to pay, students from the Irish Republic would get free tuition.

This situation, which is impossible to defend on any basis of equity, comes about because under the EU treaties member states have to treat students from other EU states in the same way as their own; but there is no such requirement between the countries of the UK. The irony is therefore that, were Scotland an independent state within the EU, it would not then be able to charge fees for students from England or the other countries of the UK unless it also charged fees for Scottish students.

This is shambles enough. There are reports in the press that the number of English students applying to Trinity College, Dublin, is expected to rise sharply, where EU students, including of course those from the UK, presently pay no fees, although all students pay a service charge. Given the dreadful economic situation in Ireland, where the Government has had to borrow from the EU and the IMF, it would be absurd for the Irish taxpayer to be funding free higher education for English students.

If fees stay at their present level in Scotland for non-Scottish or non-EU students and even if they rise, so long as they are below the average level in England, the Scottish universities are also likely to see an increase in demand from England, despite the different treatment of English and Scottish students. Given the ability of students to go to any university that provides a suitable course, one might have expected an attempt at some degree of coordination in devising future policy between the constituent countries of the UK. I do not know whether any such attempt was made, but I doubt it. Perhaps it illustrates reluctance on the part of Westminster to take proper account of the implications of devolution.

¹ An earlier and much shorter version of this paper was published in *The Scotsman* in April 2011

The big rise in tuition fees in England is the consequence of the Coalition Government's decision to try to eliminate its fiscal deficit during the lifetime of this Parliament. But its value for this purpose can be questioned, on the grounds that the fees are actually a delayed repayment of a loan and will not therefore help to reduce the Government's deficit except in the longer term. Personally I think the cut in grant too great and the consequence for fees in England too radical. There are, however, major implications for Scotland: the Scottish Government's block grant from Westminster will be reduced, since the size of the grant is directly determined by what is spent on similar services in England. If, therefore, English universities are encouraged to raise fees to make up for the cut in grant, while Scottish universities do not, a gap will open up between the funding of English and Scottish universities. Such a gap will be extremely damaging to the latter, unless the Scottish Government can make good the difference. This it could only do by diverting funds from other services for which it is responsible.

How have we got into this situation? In the 1950s there were four universities in Scotland and less than 10 per cent of school leavers went on to university. Today, as in England, both the number of universities and the percentage of school leavers going on to university has greatly increased. There are 15 universities, counting the recent conferment of status on the University of the Highlands and Islands, and close on 50 per cent of school leavers go on to university. The cost has therefore greatly increased and it is not surprising that the Coalition Government is looking to higher education for a share of the savings it has to find.

University education provides a shared benefit: a benefit to the individual graduate through increased earning opportunities as well as cultural and intellectual enhancement; and a benefit to the state if it is to take advantage of the economic opportunities that are only available with a highly skilled and trained workforce. It is therefore not unreasonable to expect some sharing of the cost. And it may be no bad thing for students to pay something towards their tuition, if it makes them realise that there is a considerable cost involved. It may encourage them to apply themselves to their work and to be critical of the value of the courses they are offered. This could in turn act as a spur towards improving such courses.

It may be asked why the general taxpayer, who may have had neither the qualifications nor the opportunity to attend university, should pay the fees of those who in later life will have the opportunity to earn much larger incomes. On the other hand, it is also, in my view, a very bad idea to load young people with a huge burden of debt. The question therefore is what is a fair balance? If English fees are raised as is proposed, it would seem that for many subjects the bulk of the cost would be met by the student, which seems to me to be going too far. Those with the highest fees could leave university owing some £27,000, or substantially more for courses, such as medicine, that exceed three years. This would have to be paid off, but not until their earnings rise above £20,000.

It seems to me not unreasonable for governments in different countries to take different views of the extent to which they wish to support the university education of their own people.

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² This excludes the Royal Scottish Academy of Music and Drama, the Scottish Agricultural College and the Colleges of Art, which are also, of course, Higher Education Institutions

It may be that either for cultural or economic reasons a government wishes to see a higher proportion of its country's school leavers go on to university than other governments do; and in such a case it does not seem necessary that they should offer the same terms to students wishing to come from other countries to study, even if they are from other EU member states. For this reason I think that the EU policy of treating all EU students in exactly the same way as those in the host country can be questioned, although I accept that encouraging students to study in European countries other than their own promotes international understanding and is certainly a worthwhile objective. But EU policy is what it is and the Scottish Government is not in a position to change it.

Faced with this situation, Alex Salmond has said that "the rocks will melt in the sun" before he agrees to impose tuition fees on Scottish students. Is this sensible, and how can he or the Labour and Liberal Democrat parties that have made similar pledges stick to it? The Scottish Government set up a technical group to estimate the funding gap that would result if no fees were imposed in Scotland but the proposed English fees went ahead. This group estimated the gap in 2014/15 at between £97 million, if average English fees were £7,000 and not indexed to inflation, and £324 million, if the average in England was £8,500 and indexed to inflation.

Michael Russell in arguing that the Scottish Government can maintain its no fees position has taken the lowest estimate of the gap - £97 million – and claimed that this can be filled by philanthropy, greater efficiency and by business. This is totally unconvincing. For a start, from what we now know of the intentions of English universities, the average fee will be much higher than £7,000 and much more likely to be at the top of the range assumed by the technical group. Furthermore, Scottish universities are already trying to get as much as they can from philanthropy and in present economic conditions it is unlikely that much more will be forthcoming from business. As to efficiency, does he have anything in mind? The amalgamation of some of the newer universities perhaps?

The expansion of the number of Scottish universities took place in two major steps. The expansion of the 1960s, following the Robbins report, that saw the foundation of the University of Stirling, the conversion of the former colleges of technology to form Strathclyde and Heriot Watt Universities and the separation of Queen's College, Dundee, from the University of St Andrews to form Dundee University. The second wave was in the 1990s when a large number of polytechnics (known as the Central Institutions) became universities. This second wave was largely unplanned and took place because the institutions themselves aspired to the status of university and saw advantages in being able to get university funding.

There are those, myself included, who had misgivings about this second expansion. The institutions concerned were all doing a good job as technical colleges and the vocational skills they provided were important for the economy. If they aspired to university status, it was important that their previous role was not lost. There could have been a case, if they really wished university status, for merger with some of the existing universities. This does not appear to have been considered, probably mainly because the existing universities were jealous of their status and concerned that merger might dilute their research ratings on which a considerable amount of their funding depended.

The upshot is that there are now four universities in Edinburgh, three in Glasgow as well as the University of the West of Scotland with its main campus in Paisley, and two each in Aberdeen and Dundee. There is a very heavy concentration in Central Scotland, when perhaps something might have been done earlier to meet the demands of the Highlands and Islands and of Dumfries and Galloway. Now that the universities exist it would be very hard to return to these structural issues. It may be, however, that, in the absence of fees, funding will be so tight that some of the more recently created institutions will find it hard to survive. I do not know whether mergers could produce substantial economies through reduced overheads such as laboratories and libraries as well as administration. But if there is going to be severe pressure on university funding, it is perhaps an issue that should be examined.

The consequence of the situation that has been created is that it would benefit Scottish universities to take as many students from the rest of the UK and non-EU students as they can, in preference to Scottish students, since they will pay fees, and to push those fees up substantially, something that Mr Russell apparently accepts. As table 1 shows, English domiciled students account for some 11 per cent of the total of first degree students at Scottish universities, 8 per cent from other EU countries and 7 per cent from countries not in the EU. But imagine a situation where Scottish students continue to get free tuition at Scottish universities, along with students from Estonia, Bulgaria and other EU countries, but English, Welsh and Northern Irish students have to pay substantially more than at present. If these fees were put up to, say, £6,000 a year, they would still be lower than the average at English universities as estimated by the technical group, but it would be surprising if the unequal treatment with Scottish and EU students did not provoke an outcry.

Moreover pushing up fees for students from the rest of the UK and from outside the EU would have a very unequal effect. As table 2 shows, some universities, notably St Andrews and Edinburgh, have a much higher percentage of English and non-EU students than others. In general the lowest percentages of such students are at the universities that acquired university status in the 1990s, though the percentages are also low for Glasgow and Strathclyde. Although all Scottish universities would suffer, the squeeze on these universities would be most severe and could put the continued existence of some of them in peril.

So there are two concerns. The first is that Scottish universities will be more poorly funded than in England, resulting in the closure of Departments, possibly even some universities, and the loss of outstanding staff, some of whom have international reputations and would have no difficulty in moving, if universities in Scotland cannot match the pay they would be offered in England or elsewhere. This would be a major tragedy, when Scottish universities are so highly regarded internationally, and damaging to Scotland, its students and its economy. If the Scottish Government attempted to rectify this by maintaining and possibly increasing the grant, it could only do so by taking funds from other services for which it is responsible. By far the largest spending services for which it is responsible are health and education, the latter being funded by the grant support to local authorities. The two together account for well over half the funds available to the Scottish Government, so it is hard to imagine that they would escape if funds had to be found for universities.

Numerous pledges have, of course, been given to protect the National Health Service and local authorities are already facing a severe financial squeeze, especially with the commitment to freeze Council Tax. Already there are reports that authorities wish to cut the number of teaching assistants in schools and doubt has been cast on the continuation of the chartered teacher scheme because of its cost.

It would not serve the interests of education in Scotland to undermine the quality of school education in order to maintain free tuition for Scottish and EU university students.

The second problem is political. Already there is a fairly widespread view in England that the higher level of public expenditure in Scotland, as compared with England, while taxation remains the same, cannot be justified.

The Council tax freeze, free care for the elderly and free prescriptions all create the impression in England that the Scottish Government can only do this because its grant from Westminster is too generous. If no tuition fees for Scottish students continue while fees are sharply raised for English students not only in England but also for those studying in Scotland, the backlash from English MPs and the English public could become serious. On neither count do I think this policy is tenable.

Table 1
Domicile of First Degree Students at Scottish Universities – percentages

Scotland	71
England	11
Other UK	3
European Union	8
Non- EU	7

Table 2
Domicile of First Degree Students at Individual Scottish Universities - percentages

	Scotland	England	Other UK	European Union	Non-EU	
University:						
Aberdeen	60	17	3	13	7	
Abertay	75	4	4	15	2	
Dundee	76	5	8	5	5	
Napier	70	8	5	5	5	
Edinburgh	46	32	3	7	11	
Caledonian	90	1	2	3	4	
Glasgow	74	10	5	7	5	
Heriot Watt	60	10	6	13	12	
Queen Margaret	65	10	9	10	7	
Robert Gordon's	83	2	1	11	3	
St Andrew's	30	30	4	10	26	
Stirling	78	9	3	4	5	
Strathclyde	88	2	2	2	6	
UHI Millennium	86	1	3	3	7	
Institute						
West of Scotland	88	-	1	8	3	

Source: Universities Scotland and Higher Education Statistics Agency

Scottish Universities – Uncertain Future?

David Bell

There are very few activities where Scotland can claim to have genuinely world-class players. Certainly our present football team is a pale shadow of those that have gone before. We have a very small number of world class companies. Again, many fewer than used to be the case. Some of our cultural activities would rate very highly, but would not be thought of as being in the first rank.

Yet Scotland has three institutions that are listed in the world"s top 100 universities. Compare this with the "arc of prosperity" countries. Denmark has two. Finland, Ireland and Norway each have one. Being high on the list is vital to attracting the best academics and students to Scotland. In turn, the universities provide one of Scotland"s major linkages to global economic, social and cultural trends.

According to the OECD, Denmark spends around 1.7 per cent of its GDP on tertiary education. Finland spends 1.6 per cent and Norway 1.3 per cent. Among the arc of prosperity countries, only Ireland (1.2 per cent) spends a lower share of its GDP on tertiary education than the UK (1.3 per cent). The UK as a whole has as many universities in the world top 100 as the rest of Europe combined. At least as far as the criteria used to measure the world's top 100 university systems are concerned, the UK system delivers good value for money. The USA has the largest share of the world's best institutions: it spends 3.1 per cent of GDP on tertiary education, a share that is more than twice as large as the UK. Many European university systems outside Scandinavia do not score well, often because they are handicapped by excessive political interference, extending as far as involvement in the appointments process in countries like Germany and Italy.

It is difficult conceptually to identify what share of its GDP Scotland spends on tertiary education. This is partly because research spending is only partially devolved. Scottish universities jointly win more than Scotland"s of population share of research funding from the Research Councils. This spending is clearly not attributable to decisions made by the Scottish Government. But the difference in expenditure between Scotland and the rest of the UK is unlikely to be large enough to take Scotland up to Scandinavian levels. The OECD measure of expenditure on tertiary education includes both private and public spending. Thus, tuition fees charged by English institutions contribute to the share of GDP spent on tertiary education.

What we do know is that the spending on college and universities in Scotland has been declining relative to other spending priorities in the last decade. In 2001-02 total spending on universities, colleges and the Student Awards Agency (which pays student fees) was £1.4bn, which amounted to 7.6 per cent of the Scotland Executive"s TME (total managed expenditure). In 2011-12, spending on colleges, universities and student awards is planned to be £2.09bn – but this will amount to only 6.2 per cent of the Scottish Government"s budget. Relative to other demands on the Scottish budget, colleges and universities have slipped down the list of priorities.

I amalgamate spending on colleges and universities in these calculations, partly because it is difficult to disentangle spending on higher education that takes place in colleges.

But I include it also because the discussion of post-school funding is often cast as a contest between colleges and universities. This is a false choice. The real issue is what priority Scotland puts on the training of young adults whether it be in colleges or universities and more broadly on schools and the very young.

There is certainly a case to be made that the status of vocational training has suffered relative to academic training throughout the UK and Scottish educational systems in the last few decades. But these should be seen as complements rather than substitutes.

When I teach economics students about modern economic growth theory, it is impossible to avoid the issue of human capital formation which then leads to the discussion of education. Education is now viewed as one of the few ways in which economies can establish the comparative advantage which in turn leads to higher productivity and increased growth.

One direct way of measuring the impact of higher education on productivity is to look at earnings. The weekly earnings of graduates in Scotland have been consistently around 70 per cent higher than non-graduates for the last decade. The recession has not changed the size of this gap. Non-graduates in Scotland are 2.5 times more likely to be unemployed than non-graduates. These are simple calculations that do not take account of the fact that more able individuals tend to select into higher education. But the studies which take account of such selection consistently show that there is a large and significant increase in productivity associated with higher education. As a result of these differences in wages and unemployment, graduates contribute a relatively large share of tax revenues. Thus, for example, graduates pay around 44% of all income tax in Scotland but comprise only 28% of the workforce of working age

Given the potential gains from HE, one would hope that the participation ratio in higher education would be rising. In fact it has been falling. In 1999-00, 52.7 per cent of the under 21s participated in HE at Scottish institutions. By 2007-08, this ratio had fallen to 43.2 per cent. Further, the gap between males and females (in favour of females) has been increasing slowly. (see table opposite)

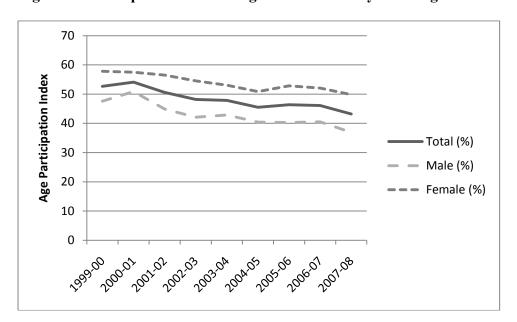


Figure 1: Participation Rate in Higher Education by those Aged Under 21

Source: Scottish Government

Because students tend to leave school a year later, the equivalent age-participation rate in England is for those aged less than 22, which in 2009-10 was 39.2 per cent. Scotland is still ahead on participation rates. But participation has been increasing in England in recent years but has been stagnant or declining in Scotland. Given developments in tuition fees, this is the reverse of what one would expect. Clearly, there are other factors at work, which seem to have been omitted from the recent debate on tuition fees, which perhaps generated more heat than light.

And the UK has low levels of participation compared with other OECD countries. In 2009, only Mexico, Turkey and Luxembourg among OECD countries had a lower rate of participation in higher education among 20-29 year olds. This low level of participation may partly reflect the efficiency of production in that the UK university systems in delivering courses over relatively short periods with low drop-out rates. But low levels of participation may also be a cause of low average levels of productivity in the UK compared with other developed countries. If this is the case, then Scottish institutions should be under pressure to accept more Scottish-domiciled students in the interests of promoting long-term growth.

Further confusion arises in relation to widening access. Scotland, though it does not charge fees, has a poorer record than other parts of the UK in attracting those from lower socioeconomic backgrounds into higher education. In 2002/03, 28 per cent of the intake in Scotland and England was from Social Classes 4, 5, 6 and 7. In 2009-10, after the introduction of fees of up to £3000 per annum, 30.1 per cent of the intake in England came from this group. In Scotland, where fees have been abolished, only 25.8 per cent came shared this socio-economic profile. Scotlish institutions have financial incentives to attract students from deprived areas. But these do not seem to be working at present, perhaps because interventions at school level are critical to changing the aspirations of those from deprived areas.

The universities are in a difficult position. They are independent, self-governing, institutions that have multiple objectives and multiple funding sources. We have already seen that in terms of international criteria for excellence such as research quality, Scotland clearly punches well above its weight. And, relative to GDP, spending on tertiary education in Scotland is not that high. But higher education institutions are also frequently asked by politicians to provide solutions for many of the ailments of Scottish society, including its relatively poor rate of economic growth and the widening access agenda. They have perhaps been too willing to claim that they could make a short-run impact on these issues, when many of them in reality can only be addressed with more holistic, long-run policy initiatives. For example, the quality of vocational training would seem to be an issue that should jointly involve schools, colleges and those higher education institutions that provide related teaching.

They now face a difficult financial future. Given the likely evolution of the Scottish Government budget in the next few years, higher education institutions will be asked to make economies and are justifiably concerned that they will fall behind their peers in England, Wales and Northern Ireland if they are unable to charge tuition fees. There are undoubtedly savings that might be made through more efficient use of resources, perhaps by finding ways of sharing back office services or by the joint provision of first and second year teaching. Of course there are difficulties associated with making such changes, but these should not be at the cost of the key positive attributes of the present system. These include not only research excellence, but also the argument for raising participation rates.

II Some Thoughts from Principals

Ian Diamond James Fraser Anton Muscatelli Joan Stringer

Some Challenges for Scottish Higher Education

Ian Diamond

1. Introduction

Scottish Higher Education has, over the past years, been incredibly successful and is a sector of which Scotland has been, justly, proud. Over the past 10 years the number of graduates has increased by 17%. Those graduates are, in UK terms, highly satisfied with their experience as, in six universities, at least 85% report being satisfied with their courses. Scotland has, in addition, an enviable reputation in research as evidenced by the £500m of competitive research funding awarded annually, and the proportion of researchers at 4* and 3*. In addition Scotland has a disproportionate number of researchers in some of the citation analysis databases.

This would suggest that everything in Scottish higher education is rosy and that, over the next few years, a steady arm on the tiller is all that is required. On the contrary, this essay will take as its central premise that while there are great strengths the external context in which we work is changing rapidly and it would be wrong to think that there were no potential improvements. To stand still would simply lead to a move backwards in terms, critically, of the offering we give our students and stakeholders and also of our standing both in the UK and more widely.

Therefore change is necessary but it must be change which enhances the student experience; which provides an environment for research to flourish; which builds on higher education as a driver for Scotland's society, culture and economy; and which does these things in the context of the well-known constraints on the public funds.

These are lofty ambitions and will only be achieved if Scottish higher and further education continue to enhance collaboration in both teaching and research in a way which celebrates the diversity of mission across higher and further education; ensures coherent educational pathways which optimise student opportunity; promotes a research culture and infrastructure which enables and is committed only to excellence; and where Scottish teams are seen as the platform for path breaking collaborations with the world's best regardless of sector or geography.

2. Student Experience

At the undergraduate level students will rightly demand that their courses are both intellectually rigorous and prepare them for what will undoubtedly be a challenging labour market. There is a need to think carefully through the curriculum so as to ensure intellectual rigour and breadth. For example the introduction of a new curriculum at the University of Aberdeen led to a major uptake in language courses as the curriculum encouraged and facilitated a latent demand. At the same time this new curriculum acknowledges a set of transferable graduate attributes and, working with the Students" Association, enunciates the idea of the student as an "active citizen". Together with the focus on intellectual rigour in the student schosen subject this provides the student with the tools to be highly competitive in the labour market of their choice.

Alongside a flexible, intellectually rigorous curriculum students will require, rightly increasing flexibility in their "learning journey".

At the undergraduate level, UK students from outside of Scotland, who will likely be paying fees, will probably have a greater propensity to enter Scottish higher education in year two. Scottish students will potentially be more likely both to enter higher education straight from Highers (as of course they did historically) or after S6 straight into Year two. This latter path may be encouraged if some of the exciting developments in the North East of Scotland, with partnerships between schools, colleges and universities, bear fruit. Coherent pathways between colleges and universities will be an essential part of a flexible learning journey and also improve widening access. Such students will often enter in year three and, together with the flows of students highlighted above, this will lead to an increasingly heterogeneous entrance cohort. This is to be desired but will put a major onus on universities to have high class pastoral care to enable a smooth transition into university.

Ensuring all those qualified to attend university are able to do so, regardless of background, will require funding – either in the form of state maintenance loans (payable back after the graduate earns a significant amount) or through university scholarships (universities should be encouraged to develop a portfolio of scholarships through philanthropy).

Widening access is not solely an undergraduate challenge. Many careers are now accessed more easily with the benefit of a higher degree. Students need to aspire to the appropriate level and to be supported in doing so. There should, for example, be easy pathways between universities to enable access to the higher degrees, thus eliminating any potential glass ceilings. This widening access to higher degrees should also be facilitated by state maintenance loans and scholarships, funded by philanthropy, in the universities.

3. Research

The recent very welcome decisions by both the Westminster and Holyrood governments to protect research funding changes, as Sir Mark Walport has said, the relationship between government and researchers and the universities which employ them. In Scotland this means that there must be a firm commitment to developing a culture where research which has the potential to impact on society, the economy, health or culture has that impact maximised. The following paragraphs highlight briefly some of the key features that should characterise the Scottish research effort.

First there must be a continuation of the dual support system. But that does not mean that the system needs to operate in exactly the same way as it does now. At present there is a one year statement that the Research Excellence Grant (REG) will stay constant in cash terms – if we were to assume that this continues for the Comprehensive Spending Review (CSR) period then this is equivalent to, broadly, a nine per cent real reduction (as with the Research Councils). This means, I believe, that it will be essential to focus only on absolute excellence and to seek to fund properly the very best researchers. Maximising excellent research suggests that the weightings for REG outputs should continue on the trajectory started in the past year by funding only the highest categories. With regard to the Research Excellence Framework (REF) I would argue that, in the future, knowledge transfer funding should be allocated formulaically using the results of the impact part of the REF.

Second, the Scottish research base needs to enhance the partnerships that have been developed by the initial pooling initiatives and to move them to a second generation. Each pool should be committed to a research programme comprising blue sky and strategic research focusing only on the areas of real excellence within the pool.

To address the challenges facing Scotland each pool should have a clear impact agenda which comprises a) research in partnership with potential beneficiaries; b)contract research for funders from other sectors including both the private and public sectors (here I note the successful initiatives under the Strategic Priority Investments in Research and Innovation Translation (SPIRIT) grant line); and c) a strategy for reviewing and acting on the non-academic potential of serendipitous developments in blue-sky research. Furthermore, the rationale for the first pool included a "pool"submission to the Research Assessment Exercise (RAE). This makes eminent sense. Scotland should have a multilevel approach to the REF. Pools should make a submission which is based on the pool"s research agenda and where the "bar" for entry is very high. This ought to give Scotland a portfolio of entries in the top five UK wide. Such a set of submissions might not preclude another set of submissions from the various universities of colleagues working in the broad disciplinary area but who were not central to the pool"s research agenda.

Third, there is also a case for a small number of really big "moon shots" funded jointly by universities, government and other sectors. Let me give four examples. First, Scotland is committed to renewables as a major initiative to drive Scotland's economy. Therefore there needs to be really significant investment in a green energy pool focussed clearly on the impact agenda and meaning that international companies had to engage with Scotland from "day zero" and so would "co-produce" the knowledge (clearly engagement with Scottish Enterprise will be critical). Second, Scotland has a short term comparative advantage in electronic patient records which should be optimised. Acknowledging the investment in Scottish Health Informatics Programme (SHIP) and Generation Scotland this now needs to be expanded in a bold and big way to have a national database linked to biomarkers, environmental and social data. This could engage the big pharmaceutical companies in Scotland in a way which would be advantageous both to the economy and to the health of the Scottish population. Third, food and drink is a key sector of Scotland"s economy, generating over £9.5 billion per year, and employing over 360,000 people. Indeed, in its Economic Strategy³ Scottish Government identified the food and drink industry as one of 6 key industrial sector drivers for future economic growth. Further, the refreshed Scotland food and drink Industry Strategy⁴ recites an ambition of increasing the turnover of Scotland"s food and drink industry to £12.5 billion by 2017 while better nutrition is essential for improved public health. Finally, and perhaps more controversially I would argue that the humanities also have a major contribution to make through the enormous potential of targeted research on Scotland"s heritage which can drive the tourist pound.

A critical feature of such big strategic initiatives is that they will need to be truly interdisciplinary if they are to be successful. Indeed, it is worth remembering that increasing prosperity requires a research base able to provide evidence on, for example, work practices, well-being, or design and that these areas depend on a healthy base across the arts, humanities and social sciences. This is not to imply that other disciplines are not also critical to a 21st Century research base but merely implies a strong Scottish research base needs breadth across a range of disciplines

Fourth, it will be essential to have leading edge research infrastructure. At a time when public funds for research capital will drop significantly it is essential to maximise the availability of high class infrastructure.

³ www.scotland.gov.uk/Resource/Doc/202993/0054092.ndf

www.scotlandfoodanddrink.org/Asset.aspx?item_id=61693&name=Industry Strategy Refresh Doc.pdf

Within Scotland the pools will need to work together to ensure access to infrastructure across institutions; within universities there will be a need to share equipment (here the impact of Wakeham and its interpretation by Research Councils UK (RCUK) will be key); and UK wide there will be a need to prioritise funding – noting a) that not all facilities currently funded will be able to be continued; and b) that funds for research infrastructure are required not only by "big" science but also in the social sciences and indeed humanities. A further area of infrastructure which it will be important to secure for Scotland will be Technology Innovation Centres. Here a national coordinated approach is essential

Logically, excellent research infrastructure must be used. This implies that funding should be concentrated to ensure both critical mass of teams and effective use of resources. This needs to be undertaken so as to maximise research productivity noting the increasing evidence of a logistic or indeed inverted U relationship between laboratory size and research productivity.

Fifth, a research base is only as good as its next generation of people. This requires that Scotland has a strong cadre of research students and early career researchers and a strategy for their career development. A critical part of this strategy must be proper training in all aspects of research methodology, ethics, management, entrepreneurship, public engagement and impact. This can only be done effectively by ensuring critical mass in such development programmes. Scotland wide disciplinary graduate schools accompanied by university wide graduate schools at a local level are, I believe, the only answer for all but the very biggest universities. In this area the increasing concentration of research student funding by the research Councils is to be applauded.

Sixth, a strand running through this piece has been the need for partnership and for Scotland to work as a nation rather than solely as a series of competitive institutions. However effective prosecution of this policy means that partnerships have to be with the world's best and must cut across sectors as well as institutions. This means, for example, continued positive engagement with the NHS and a step change in engagement with industry. To turn to the relationship with industry this needs much greater traction. While there are opportunities with large multinationals, the Rolls Royce partnerships being a fine example, there needs to be a coherent strategy for the maximum engagement of small and medium enterprises (SMEs). Here there may be opportunities for organisations such as the Scottish Council for Development and Industry (SCDI) and CBI (and Scottish Enterprise through their account managed companies) to coordinate groups of cognate SMEs needing research which could benefit all. However in developing partnerships with sectors of industry which do not have a history of research, continued use of, for example, voucher schemes will be highly desirable.

4. Summary

Scotland has a system of higher education which is one of Scotland"s major assets. It has the potential to remain so and to have an enhanced impact on Scotland"s economy, society, health and well-being. Achievement of this will be encouraged by improved flexibility in the pathways by which students pursue their learning journey and, by implication increased flexibility for universities in the number of students they admit.

Empowering Scotland as an innovation based economy means that outstanding researchers have the time, environment and facilities to be creative and to innovate. Such an environment will be encouraged by enhanced pools and ensuring critical mass both of researchers and research students.

In this there are important roles for government and universities to invest strategically and to have policies which ensure the environment is rich for creativity. In a difficult funding environment this will require hard decisions but if made strategically could bear real fruit for Scotland.

The Future Funding of Scottish Universities: Heading down the Rocky Road

James M Fraser

The Dilemma

English and Scottish university systems were very different from each other in the 19th century. By the mid -1960s, they had become much more similar, not least in student support through both fees and maintenance. On both sides of the border:

"....the 'golden age' of student grants was just beginning.

The Ministry of Education referred the question of student grants to the Anderson Committee, which reported in 1960. This recommended a national system whereby every student enrolling on a degree course for the first time became eligible for a grant towards tuition fees and maintenance, the actual level of grant depending on student income."

But a mere three decades later, the systems began to diverge: with the post-Dearing introduction in 1998, in England only, of a student contribution to tuition fees; with the 2006 introduction of the so-called "top-up fees" in England; with the abolition in 2008 of the graduate endowment contribution in Scotland; and then with current UK"s government plans for English universities. From 2012, the two systems (as plans presently stand) will indeed be very different from each other.

The consequence of the devolution settlement is therefore that the university systems of the UK nations have drifted apart. This has created considerable difficulties in a system which for some thirty to forty years had presented a largely undifferentiated financial face to all students in the separate parts of the UK. The consequences for both Scottish and English universities will almost certainly be profound, if hard to predict. For Scottish universities the rocks may not melt in the sun - but the tectonic plates will certainly shift.

Replicating in Scotland the decision by the UK Government to move the burden of funding teaching in the English Universities from the state to the student (or the graduate) would be unacceptable to most of the Scottish political establishment, certainly to four of the five main political parties. This threatens to produce a funding gap between Scottish and English universities estimated at some £200m on an English fee level of £7500 pa. ² (An English fee level of £7500 pa now seems at the low end of the range, and certainly underestimates what would be the effective funding gap between the highest ranking English universities and their Scottish counterparts).

This gap, if unabridged, will threaten the competitive position of Scottish universities, open them to a loss of their best staff and hazard their successes in research and in attracting high quality students.

The options for meeting the shortfall are public funding, income diversification and/or the imposition of some form of payment on students or on future graduates.

² Report of the Scottish Government Technical Group on Higher Education 2011

¹ Going to university: funding, costs, benefits by Carol Dyhouse Accessed at http://www.historyandpolicy.org/papers/policy-paper-61.html (9 May 2011)

In the face of competing demands for limited public funds there is a real danger that Scottish Government will be unable to cover the deficit from public funds and their political distaste for charging either the student or the graduate will mean that universities will be left without any means of closing it.

The recognition that university education is a public good and not simply something which is beneficial for the individual recipient is a laudable and a socially cohesive viewpoint. The preservation of the Robbins principle, that ability alone should be the criteria for entry to a university education and that wealth or the lack of it should be no bar, is also one which resonates with the traditional value placed by Scots on university education. It is not true that Scottish university education was always free (although, first of all through the Carnegie Trust and then through government efforts, it gradually became so, starting from about 1901 onwards). Certainly in the period of mass higher education a free University education has been and is rightly regarded by the population as something of great value and worthy of preservation. The question is how a Scottish government can adequately fund Scottish universities without imposing fees on the student, a charge on graduates or intolerable burdens on the budgets of the other government services. Given the research on the efficacy of investing in pre-5 children³, universities have a challenging argument to make even within the education budget before we consider the competing demands of the elderly, of the health and social service budgets and of local authorities.

Another issue facing the Scottish system (and one for which there is no easy fix) relates to incoming EU students from outside the UK. Until 2006, such students faced a level playing field between Scotland and England. Since 2006, they have paid a tuition fee of over £3000 per year to study in England; but *de facto*, certainly since 2008, a zero tuition fee to study in Scotland.

If one compares the 1st year enrolment of such students between 2005-2006 and 2008-2009, the numbers in England went up from 33700 to 37200, a rise of just over 9%; but the numbers in Scotland in the same time period went up from 4700 to 6400, a rise of 27%. On this evidence, geographically mobile EU students appear to be sensitive to price, a wholly unsurprising finding. As a consequence, the equivalent of one Scottish university is entirely populated with non-UK EU students and the Scottish Government pays the teaching cost of their education in its entirety. (While tuition fees remain effectively zero for undergraduate Scottish students, the Scottish Government has no choice in this matter. It can, and does, discriminate against English students; but EU law does not allow it to discriminate against other EU countries).

It does not take much imagination to see that, if post-2012 Scottish tuition fees remain effectively zero and English tuition fees rise as planned to up to £9000 per year, we are likely to see still more Scottish university places filled from elsewhere in the EU: all at the expense of the Scottish Government. This would be (unintended) altruism on a grand scale.

Additionally non-Scottish EU undergraduate students count for quota purposes in exactly the same way as Scottish students. (What are usually described as "overseas" students i.e. students from outside the EU are not subject to quota).

⁴ HESA statistics

³ 2006 Heckman JJ Iowa Business Council Accessed at http://www.iowabusinesscouncil.org/files/INVEST~1.PDF on 13 May 2011

In a system where undergraduate numbers are firmly capped by the Scottish Government, each non-Scottish EU undergraduate student who is admitted to a Scottish university deprives an aspirant Scottish undergraduate of a university place.

The Green Paper on Scottish higher education⁵, published before the election, is wide ranging both in its suggestions as to diversification of income and in hints at ways of reducing the cost of delivery.

The difficulty with the diversification of income i.e. more money from companies, student sponsorship⁶, more fundraising, overseas fees, fees from English students etc. is that universities do not believe that collectively these incomes will meet the gap, although clearly they will help. The report of the Technical Group explains the difficulties in more detail.⁷

But Universities Scotland, the umbrella group for Scottish Universities, supports the contention of the Green Paper that universities need to be more flexible in their delivery models than they have been in the past and that the system should recognise that between the start of secondary education and degree year 4 there may very well be, for many students, a redundant year.

One Step out of the Dilemma

Consider the idea that the typical Scots graduate might take one year less that at the present time to make the progress from being a 5-yr-old at the start of compulsory education to becoming an honours university graduate. That would offer up savings, both in student support costs and in the costs of educational delivery. At present, the typical (full-time) route takes 7 years in primary school, 6 years in secondary school and 4 years in university- i.e. 19 years in all. (For those who take that route via an FE college course between school and university, it usually takes even longer: a problem not helped by the divergences, both substantive and pedagogical, between HE courses in colleges and HE courses in universities. This in itself is problem which may be worthy of some attention).

But how would one implement such a change i.e. shorten the typical journey time from primary school to the acquisition of a university degree. Judging by the statistics of the last decades, it is not easy to persuade more S5 Scots with good grades to go straight to university rather than doing S6; nor to persuade more who have Advanced Highers or A-levels to apply to the second year of a university degree. Nor, as we have already pointed out, is it always easy to persuade the more established Scottish universities to accept College HNC graduates straight into 2nd year or HND graduates straight into 3rd year.

Perhaps the Scottish government might guarantee free education for Scots for a period of 18 years, but expect a graduate contribution from those who take more than 18 years (or its equivalent in periods of part-time study) to gain a degree?

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⁵ Building A Smarter Future: Towards A Sustainable Scottish Solution For The Future Of Higher Education 2010. Accessed at http://www.scotland.gov.uk/Resource/Doc/335256/0109656.pdf on 13 May 2011.

⁶ Sponsorship of students i.e. by industrial and commercial organisations is a particularly interesting area, where the direction of travel has probably been down rather than up. What modern firm sponsors attendance at the University of Edinburgh as the Stevenson lighthouse-building firm did in the 19th century? See Bella Bathurst *The Lighthouse Stevensons* (London, 1999). Consider also how the costs of training accountants swung from accountancy firms to the state in the 1960s and early 1970s.

⁷ pp6-10 Report of the Scottish Government Technical Group on Higher Education 2011

This might persuade more Scots to transfer into higher education at the end of S5 or to move from S6 directly into the second year of a university degree. To the extent that it did not, it would raise revenue for universities: i.e. if a combination of savings and of the graduate contributions was channelled into universities that would provide some (modest) closing of the funding gap.

This would of course be discriminatory i.e. it rewards those who accelerate their studies and penalises those who do not; but not all discrimination is wrong or indefensible. It would preserve the principle that the state education is free right through to university graduation (for undergraduates); but only totally free for those who take the minimum time to achieve this – they exit as graduates who bear no debts to government, at least not in respect of tuition costs. For the rest, they might exit with an obligation that they will, over some years, make a graduate contribution of, say, about £6000 (roughly the annual tuition cost of the typical Scottish undergraduate).

A Further Move Step out of the Dilemma

By the mechanism set out above the Scottish Government could reduce their support for the journey to a degree by one whole year. It may be possible however to preserve the Government's commitment to a free university education and reduce their support still further by offering 17 rather than 18 years' support and asking the student to make a contribution to the 18th year. The 18th year for many students would be the final honours year. Arguably the contribution of honours to the graduate pay advantage suggests some equity in securing the contribution for the final year. This proposal allows the Scottish Government to preserve the Robbins principle, to continue to underline public good of higher education but deliver itself from the total burden of funding to honours. This model would also have the advantage that from time to time if Governments perceive market failure in some areas of the workforce they would be able to pull the market towards the production of particular graduates by choosing to sponsor on an exceptional basis the contribution in the 18th year.

A Thought on Flexibility

It is interesting to ask oneself the question "What occupations exist today that existed 2000 years ago?" Into the "no" category, one would put, and I only choose some examples: chemists, systems analysts, TV presenters, airline pilots, submariners, etc. Into the "yes" category, one would put, for example: doctors, priests, teachers, shepherds, farmers, engineers, soldiers, fishermen, sailors, cooks.

Now ask the question: "Of those occupations that have existed for more than 2000 years, which have been transformed by technology?" Doctors, certainly; even shepherds, possibly (certainly in how they manage the lambing process); farmers, certainly; engineers, certainly; soldiers, certainly; fishermen, certainly; sailors, certainly; cooks, certainly. That leaves priests and teachers using, for the most parts, techniques that have existed for millennia. This includes, for the most part, university teachers. With the exceptions of the invention of the printing press, the photocopier and PowerPoint, it is difficult to think of major ways in which the job of most university teachers has been transformed in over 2000 years. Modern technology promised changes.

But progress has been spasmodic. The dawn of programmed learning gave a promise of transformational change in teaching.⁸ It proved to be illusory. On the other hand, the creation of the Open University in the UK is an illustration of what can be done, as is the more recent growth of the University of Phoenix in the USA – a major provider of on-line learning.

In Scotland the development of the University of the Highlands and Islands with its blended learning delivery system, underpinned by video and other IT technology offers potential advantages to students and companies and others but does not offer cheaper delivery. The start-up costs can be very high, both in the costs of the technology and its on-going refreshment and in the costs of developing good on-line curriculum materials.

Flexible on-line delivery, supplemented by other forms of delivery such as face-to-face or face-to-face through video-conferencing, does offer a potential for savings to the student of the personal cost of education in two ways. Firstly, for those who wish, it enables elongation of the process and therefore a greater opportunity to learn while working, while looking after a young family or other dependents. Secondly, for those who wish, conversely it allows for shortening of the process by utilising the summer period as additional study time. In both cases by shorter exposure to higher education, or elongated exposure which enables earnings, the personal burden of university education is reduced.

For those students however who opt for the current full-time paradigm of a 3 or 4 year university education the elimination of the one redundant year between P1 and final honours and the possibility of a contribution to the final year offers the commitment to a free university education, which is a Scottish *desideratum*, but enables some element of contribution to be collected from the graduate beneficiary.

(The views expressed in this article are personal; they do not necessarily reflect the view of the University of the Highlands and Islands)

⁸ http://en.wikipedia.org/wiki/B. F. Skinner#Teaching machine accessed on 10 May 2011

Universities, Skills and Maximising Social Opportunity

Anton Muscatelli

1. Introduction

In September 2010, I delivered a talk to an Open Thinking event organised by Barnardo's, the RSA and Scotland's Futures Forum. There I suggested that examining the role our Scottish Universities play in society has never been more important. This is not just because of recent UK-wide debates on Higher Education funding: it is I believe, more fundamental than that.

What matters more for the future of Universities is for them to assert their fundamental role in society: as drivers of skills, engines of innovation and in providing opportunities for all. In this essay I will focus on the importance of skills and participation in HE and on the role which Universities must play in delivering on the goal of increasing social mobility. It is the fundamental value of Higher Education to wider society which will, as it has always done, ultimately determine the funding it receives from the public purse.

In doing this, I will take as the starting point the recent Green Paper in Higher Education, Building a Smarter Future (December 2010). It analyses many of the issues covered here and provides a platform for the development of future HE policy in Scotland.

2. Skills and Participation

As noted in the Green Paper¹ (2010), Scotland has enjoyed relatively high levels of participation in HE. The Age Participation Index, which estimates how likely young people are to enter HE has grown from 10% in the early 1960s to 43% in 2008/09.

Participation rates in HE are often an area for debate, and at a time of tight public funding and higher graduate unemployment due to slower economic growth, it is natural that the general public will debate what the appropriate level of participation should be.

It is clear from OECD evidence however, that the increase in participation has been warranted by the increased demand for graduate skills. Increased Scottish (and indeed OECD) participation in HE has been more than matched by the increase in demand². This is one reason why the wage premium (the amount graduates earn relative to non-graduates) has continued to grow, despite the expansion in HE.

In a study commissioned by the OECD, Machin and McNally (2007) point out that this phenomenon has been evident for several decades and, if anything, seems to have accelerated in recent years. This increase in demand for graduate skills is probably due to "skills-biased technical change", which basically means that as new technology is adopted, the demand for graduate skills is growing faster relative to the demand for non-graduates.

http://www.scotland.gov.uk/Resource/Doc/335256/0109656.pdf

¹ Building a Smarter Future. Scottish Government – see

² Although there seems to be some evidence of over qualification in some countries (Korea, Mexico, Estonia) – see OECD (2008).

Of course, this doesn't mean that during a time of recession graduates find it easy to secure employment. What the evidence does show however, is that when the economy and job market do bounce back, employment prospects tend to recover much faster for graduates than those without degrees.

That said, as Machin and McNally (2007) note, there is evidence of "skills mismatch "where employers across the OECD, find that graduates looking for work do not have the particular skill set they need and want. There may be excess demand for graduates - but there may also be room for improvement in matching the required skills by employers. Evidence for this is found in Canada (see Drewes, 2010), as well as the UK, France, Germany and the US by Machin and Puhani (2006a,b), which look at the extent to which the graduate wage premium varies by field of study.

Some countries, like Australia, have looked to readdress this mismatch. One of the major problems in doing this successfully is that there is a very real lack of information which employers and Universities can draw on to plan so that graduates possess the skills and experience needed for employment. If this hurdle is to be overcome, it is vital for potential students to have the right mix of information to help them make informed choices. This is one area in which Universities in Scotland should co-operate even more closely with employers to achieve this goal. We must ensure that skills match demand.

Similarly, it would benefit Government to have evidence which would allow it to plan properly if rapid technological change affects the mix of skills as well as the demand for different levels of HE (sub-degree; graduate; postgraduate) required by employers in future.

Skills-biased technical change is also important because it is potentially one of the drivers which has caused greater income inequality in a number of OECD countries. If the demand for certain technical and graduate skills rises more rapidly than the supply of those skills, this not only constrains economic growth, but it leads to greater wage differentials between and within professions.

Higher education can therefore play an essential role as a vehicle of opportunity. We now turn to this issue.

3. Universities, Widening Access and Social Opportunity

The Green Paper recognises the improvements which have been made in recent years to widening access to higher education. This has been achieved through student support policy, through Universities" own initiatives, through the role of colleges, the focus on part-time and adult learners, and through better articulation between schools and colleges and Universities.

All these policy instruments are important. There is no single solution to ensuring that HE can be an even more effective vehicle for social opportunity. By definition, if the graduate wage premium shows no sign of decreasing, and if skills-biased technical change will increase in future, it is essential for social mobility that new, additional, mechanisms are found to improve access for people from under-represented groups in higher education.

It is also worth saying that this is not an issue which should only be confined to part of the HE sector. As reported by a recent Institute of Fiscal Studies and IoE paper by Chowdry et al (2008, 2010):

"Another aspect of the Widening Participation agenda that we have explored...surrounds the type of HE experienced by the student. We find that there are large socio-economic and ethnic gaps in the likelihood of attending an HE institution with high status (as measured by research intensiveness)..."

Worryingly, we know that some studies show that the return to higher education varies significantly not only by degree subject, as highlighted in section 2, but also by University type (see Chevalier and Conlon, 2003; Iftikhar, McNally and Telhaj, 2008). I am proud that, among the Russell Group Universities, my own University performs extremely well compared to its peers in terms of participation from state schools (87.3 % in 2009-10) and from lower income socioeconomic groups (20.2 % in 2009-10)³. However, it is clear that improving social mobility will require us to continue to focus on improving access to the whole of the Higher Education sector, not just a subset of our Universities.

What makes the task so challenging is that the greatest barrier to this is clearly school attainment. This is recognised in the Green Paper which notes that a step change in widening access requires better interaction not with the school system in its later years, but also in early-years teaching, and in how to raise aspirations and hence school attainment.

As Chowdry et al (2008) note:

"The implication of this finding is that focusing policy interventions on encouraging disadvantaged pupils in post-compulsory education to apply to university is unlikely to have a serious impact on reducing the raw socioeconomic gap in HE participation. This is not to say that universities should not carry out outreach work to disadvantaged students who continue into post-compulsory education, but simply that it will not tackle the more major problem underlying the socio-economic gap in HE participation — namely, the underachievement of disadvantaged pupils in secondary school. .."

and further:

"Once we take account of prior attainment, we find that the impact of material deprivation on the likelihood of attending a high-status university largely disappears. As for participation per se, this suggests that if we want to widen participation in high-status institutions amongst students from more deprived backgrounds, then we need to focus on improving their educational achievement in secondary school."

We know from earlier work in the US and the UK, that the major challenge is to improve children's development at pre-school and primary level where gaps in educational achievement begin and often persist.⁴

What policy interventions can one devise in this area?

The Green Paper mentions the US KIPP programme⁵, and suggests that Universities could extend links with Schools and Colleges to raise aspirations from the earliest ages.

³ Source HESA PIs Table 1a Participation of under-represented groups in higher education: young full-time first degree entrants

⁴ For the UK see CMPO (2006) and for the USA see Cunha and Heckman (2007) and Cunha et al. (2006).

⁵ See www.kipp.org

There is however a limit to what individual Universities or schools could achieve in a similar vein to KIPP schools without much more systematic co-ordination, at least at regional level.

Second, one could encourage those Universities in Scotland which focus on teacher-training to use existing links with primary schools to raise awareness of the importance of higher education, thereby raising aspirations of tomorrow's future students.

Third, targeting some elements of student support towards merit scholarships in Higher Education, and identifying potential candidates for these earlier in secondary schooling might prove to be an effective way of encouraging attainment in later years. In recent years, many Universities, like Glasgow, have focused increasingly on providing and fundraising for talent scholarships for students from underrepresented socioeconomic groups. These efforts should be increased.

Fourth, given the importance of school attainment, providing some mobility between Universities and between FE and HE to assist those students who wish to move to take their funding with them. As noted in the Green Paper, this could encourage Universities to compete on teaching quality. However, more importantly in this context, it would allow students who have been hampered by school attainment to achieve their choice of University and from there, to go on and flourish completing a course suited to their talents and skills. This again, could improve social mobility given the evidence on variations in graduate earnings premia between subjects and institutions.

Finally, curriculum reform through *Curriculum for Excellence* with its focus on helping young people to develop as confident and responsible citizens and successful learners might be a useful vehicle to foster aspirations on higher education from a younger age.

Universities are potentially a major vehicle to improve social mobility. Doing more in the area of widening access is challenging. Nevertheless it is essential if we are serious about tackling income inequality. Crucially, Universities have to do more in this area. Government can provide assistance in co-ordinating schools, colleges and Universities, and in providing funding mechanisms which encourage social mobility. But ultimately it is the Universities who must also respond to this challenge to "move further upstream in the educational pipeline" in their search for talent.

4. Conclusions

I began this essay by saying it was crucial for the sector to focus on its raison d'être, as we move beyond the important, but narrow funding debate. Given the constraints of space, I have chosen to focus on the issue that Universities are essential to providing the skills for a country's future prosperity but the same could be said for the University's research base. It is crucial, as I have indicated, for us to understand where trends in economic growth and technical change will take the demand for HE skills in the next two decades and to start preparing for that now to avoid mismatches, to improve our provision, and to inform potential students and employers on how they can optimise their opportunities.

I have also focused on that other major role of Universities: that of institutions which can transform lives, provide opportunities, and drive social mobility.

If we are convinced that these opportunities should accrue to all parts of society, then we need to think seriously about how to achieve that next step in our efforts to widen access to Higher Education. And that should involve all Universities, not just some part of the tertiary sector.

References:

Chevalier, A. and Conlon, G. (2003), "Does it pay to attend a prestigious university?", Centre for the Economics of Education (CEE), Discussion Paper no. 33.

Chowdry, H., Crawford, C., Dearden, L., Goodman, A. and Vignoles, A. (2008),

"Understanding the determinants of participation in higher education and the quality of institute attended: analysis using administrative data", Institute for Fiscal Studies, mimeo.

Chowdry, H., Crawford, C., Dearden, L., Goodman, A. and Vignoles, A.

(2008), Understanding the determinants of participation in higher education and the quality of institute attended: analysis using administrative data", Institute for Fiscal Studies, WP 10/04.

CMPO (2006). Family Background and Child Development up to Age 7 in the Avon Longitudinal Survey of Parents and Children (ALSPAC), DfES Research Report no. RR808A.

Cunha, F., Heckman, J., Lochner, L. and Masterov, D. (2006), "Interpreting the evidence on life cycle skill formation", in E. Hanushek and F. Welch (eds), Handbook of the Economics of Education, Amsterdam: North-Holland.

Cunha, F. and Heckman, J. (2007), "The technology of skill formation", American Economic Review, vol. 92, pp. 31–47.

Drewes, T. (2010) "Postsecondary Education and the Labour Market in Ontario". Report prepared for the Higher Education Quality Council for Ontario.

Iftikhar, H., McNally, S. and Telhaj, S. (2008), "University quality and graduate wages in the UK", Centre for Economics of Education, mimeo;

Machin, S. and McNally, S (2007). "Tertiary Education Systems and Labour Markets" OECD Report.

Machin, S., and P. Puhani, (2006a), "The Contribution of Degree Subject to the Gender Wage Gap for Graduates: A Comparison of Britain, France and Germany," Report to the Anglo-German Foundation.

Machin, S., and P. Puhani, (2006b), "The Contribution of Degree Subject to the Gender Wage Gap for Graduates," mimeo. University College London.

OECD (2008). Tertiary Education for the Knowledge Society vol.3, OECD.

Funding and Purpose: Thinking Beyond the Gap

Joan Stringer

A gap may be an opening or a ravine. It is a small word but with political potency and as such has been much used and much manipulated in political discourse. Early Cold War American politics focussed on perceptions of a "bomber gap" and a "missile gap" - memorably parodied as the "Doomsday gap" in Stanley Kubrick's *Dr Strangelove* - and since shown to have been misleading. Domestic politics as far as it relates to higher education in the recent Scottish election has focussed on a "funding gap" meaning the difference in resources that will be delivered to higher education on a like-for-like basis, between the new fees and grants model being introduced in England and the current publicly funded fees and grants model in Scotland. The "gap" is, in effect, the shortfall in funding that will accrue to Scottish universities once the new English model is implemented.

The "gaps" of the Cold war era were constructed as political tools, used to justify a response which was not founded on real need or the fundamental purpose of a system of defence. An important recent contribution by an expert working group on the size of the "funding gap" faced by Scottish higher education endeavoured to set out facts and reasonable assumptions. However, this evidence has been subject to interpretation in order to justify a range of proposed responses – predominantly those requiring minimal change to the current Scottish funding model on the grounds that the gap is a narrow one and can be bridged without major reform. Real need and fundamental purpose have taken back seats, for now.

The total resources available to higher education in England following the reforms will in due course move from the realm of assumption and interpretation to the realm of fact. All the indications are that the true or actual "funding gap" measured in hundreds of millions of pounds will be substantial by any criteria.

Nevertheless, when the funding gap in pounds becomes fact, its significance will remain mercurial. When the English reforms are implemented in 2012/13 the higher education systems in Scotland and England will have diverged in terms of their internal dynamics to the point where the funding gap provides at best a partial insight into their relative effectiveness and competitiveness.

Competition between Scotland and England is, however, just one feature of what is now the global higher education business. Comparisons with the resources available to higher education and the effectiveness of systems in other countries may be at least as instructive in determining the resource needs of higher education in Scotland.

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¹ See for example: "Whoever believed in the missile gap?" John F Kennedy and the Politics of National Security, Christopher A. Preble, Presidential Studies Quarterly, Vol. 33, Issue 4, pp 801-826 Wiley-Blackwell, December 2003.

² Report of the Scottish Government – Universities Scotland Technical Group on Higher Education, Scottish Government Publication, 28 February 2011.

While tuition fees in England from 2012/13 will be among the highest in the world, the OECD reports³ that the UK as a whole has slipped from third to fifteenth in numbers - or proportion of the relevant populations - graduating among industrial countries and that it spends below the average proportion of GDP on higher education. A fixation on comparisons with England may thus mislead and cause Scotland to lose sight of its position and its aspirations in the wider world. Similarly, a fixation on competition with England risks negating the position of both systems within the United Kingdom's international reputation and brand including shared strength in the funding and peer review of research. Is it possible therefore to take a different approach to analysing the needs of Scottish higher education? It would of necessity be a rather more complex approach than simple comparisons of funding between the Scottish and English systems. But there may be a means to deliver a clearer understanding of how the Scottish system can develop independently, distinctively and sustainably.

The starting point would be to achieve greater clarity (if not agreement) about the purpose of higher education in modern Scotland, meaning in particular the purpose of higher education as delivered by our universities. (The term higher education embraces provision of the college sector in Scotland, at the Higher National level plus undergraduate provision within the university sector: the former accounts for approximately one third of the 43 per cent of under -21s who enter higher education.⁴) Higher education has been extensively reviewed and much has been written about its purpose. The last UK-wide Review led by Lord Dearing in 1997⁵ defined the aim of Higher Education as being "to enable society to make progress through an understanding of itself and its world: in short, to sustain a learning society" and described its four main purposes as:

- to inspire and enable individuals to develop their capabilities to the highest potential levels throughout life, so that they grow intellectually, are well-equipped for work, can contribute effectively to society and achieve personal fulfilment;
- to increase knowledge and understanding for their own sake and to foster their application to the benefit of the economy and society;
- to serve the needs of an adaptable, sustainable, knowledge-based economy at local, regional and national levels;
- to play a major role in shaping a democratic, civilised, inclusive society.

Dearing referred back to the purpose of higher education as it had been defined by the Robbins enquiry thirty four years earlier, noting that the purpose had evolved over time as demand in the economy for skilled labour had increased and that for unskilled labour had decreased. The early-1990s could be viewed as a pivotal period when higher education was increasingly involved in developing the capabilities of people in a whole range of activities. Just as the expansion of state secondary education and the raising of the school leaving age had been fundamentally a response to the changing needs of the economy through the early and mid-20th century, the increasingly advanced economy and increasingly complex society of the late 20th and early 21st centuries required the higher education sector to expand significantly and to take on a wider purpose and role, though perhaps that wider purpose was often more implicit than explicit.

³ Education at a Glance 2010: OECD Indicators, OECD 2010

⁴ The Scottish Government: Age Participation Index for Scotland 2008-09

⁵ Report of the National Committee of Inquiry into Higher Education, 1997

While expansion has come hand in hand with increased efficiency and the per capita unit of resource has reduced over time, the total burden on the public purse has steadily increased in real terms – a trend only to be reversed following the 2010 Comprehensive Spending Review. Scottish Government recurrent funding for higher education peaked at £1,034m in 2010/11 compared to £581m in 2000/01⁶.

The significance of higher education as a proportion of total Scottish Government spending combined with the limitations of devolved powers to raise revenue has led successive Scottish administrations to focus on value for money and the economic impact of the sector in setting (or attempting to constrain) higher education budgets. In so doing, it could be argued, higher education has increasingly and perhaps inevitably become viewed as an instrument of the state in delivering economic and social policy. Such thinking was clearly exemplified in the "challenges" to the sector in the report of the Joint Future Thinking Taskforce on Higher Education which was established in 2007 and in particular stated that "universities must demonstrate that they use the funds they receive from the Scottish Government to support activities which are well aligned with the Scottish Government"s Purpose"

When considering the purpose of higher education it may therefore be helpful to consider both the essential purpose of the activity and the purpose of the State as an actor in supporting its delivery.

Higher education institutions are autonomous bodies, but ones which operate within a public funding framework which governs aspects of their provision and through which they are accountable for their use of public funds. This public funding mechanism and associated regulation which has come to dominate strategic thinking in higher education and government policy touches, controls, and in some cases restricts the whole spectrum of activity undertaken by HEIs.

However, a significant and growing proportion of activity in the sector is funded from non-governmental or private sources or is delivered through private sector companies. Much of this is well aligned with government economic and social priorities. For example, the recruitment of international students and the associated ability to promote Scotland overseas is of direct benefit to Scotland. But like so much else, universities" international work goes beyond any strict mapping onto the policies of the government of the day in developing people and organisations and building inter-cultural awareness and understanding.

Around the world, many higher education systems embrace private sector involvement. In some systems, notably in Latin America, the private sector has a dominant role. A number of systems with a tradition of public funding, including Australia in the late "80s and the UK in the late "90s, have moved to increase private contributions through fees and other measures. The limitation of the role of the State is a topic of debate even in countries with very strong traditions of state funding and state control. For example France has since 2007 moved to increase institutional autonomy and to promote new forms of private sector engagement.

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⁶ Building a Smarter Future: Towards a Sustainable Scottish Solution for the Future of Higher Education, Scottish Government Green Paper, December 2010.

⁷ New Horizons: responding to the challenges of the 21st century, The Report of the Joint Future Thinking Taskforce on Universities, Scottish Government publication, November 2008

Higher education providers generally operate across the public, private and third sectors. This is currently the case in Scotland and enables the sector to maximise resources and quality by drawing on and balancing a range of funding sources.

That is why the autonomy of higher education institutions matters and why they are and need to be different in character to providers of many other public services. They need to be autonomous because these multiple accountabilities need to exist if the sector is to be as effective as it can be and because, in Dearing's words, universities "play a major role in shaping a democratic, civilised, inclusive society". Part of that role is founded on academic freedom; the ability to "speak truth to power" and to criticise and critique the policies of the government of the day among others.

The role of the State in delivering higher education is thus defined to some extent by the involvement of other actors. And yet, as noted above, in Scotland State engagement dominates strategic thinking and there has been less debate and less change in this respect than in many other countries. Innovations including student-funded fees and the graduate endowment have come and gone, and there have been changes at the level of detail, but the Scottish model of public funding for higher education has not changed much in terms of its broad impact since the demise of the University Grants Committee. That is to say it is a mechanism which controls student numbers; the availability of particular types of provision and priorities in research and through those controls effectively shapes the broader aims and objectives of individual institutions and of the sector.

The Scottish Government Green Paper on Higher Education published in December 2010 stressed the continued primacy of the State in funding higher education, to little dissent. However, the debate about the "funding gap" and the view that answers may be found in greater efficiency than has been achieved so far has illuminated the tension between the primacy of the State and a controlling State funding model and the wider and widening purpose of higher education.

If the purpose of higher education is clear and it is and clear that it is broader than particular national objectives and the government spurpose, it may be possible to redefine the role of the Scottish State in delivery – i.e. that which the Scottish State needs to do to ensure that its purpose is achieved: the sphere of activity within which it has primacy and outwith which it does not.

For example, the State may wish to ensure that any of its residents or citizens capable of benefiting has the opportunity to attend university and may therefore focus public funding on students who would otherwise face financial or other barriers to accessing higher education. The State may wish to ensure that the key sectors of the Scottish economy are supported by the indigenous knowledge base and may therefore focus funding in relevant disciplines. The State may wish to support aspects of Scottish cultural life and focus funding on research and teaching which supports that.

There must be a distinctive Scottish answer to the question.

In a scenario where there is a more clearly circumscribed role for the State, it follows that there must be corresponding clarity about the limit of State control, direct and otherwise.

Higher education providers must be free to continue to fulfil the wider purpose of higher education and to meet demand from individuals and organisations whose needs are not the focus of State funding. They must be free to price such provision based on cost and to grow and shrink such provision in response to demand.

In Scotland, we need to have the debate we have not yet had and we need to develop a national consensus about the purpose and limits of State involvement in funding, supporting and controlling the delivery of higher education.

It is the answer to that big question, and not the several answers to the narrow question of the size of the funding gap between Scotland and England which will lead to effective reform. It is the answer to that big question which will allow strong, autonomous, Scottish universities to develop new and more effective strategies to enable individuals; to increase knowledge; to support economic growth; and to contribute to society in Scotland and beyond Scotland.

III Comments from Informed Parties

Anthony Cohen
Andrew Cubie
Jim Gallagher
Iain McMillan
Chris Masters
Andrew Miller
Stewart Sutherland

A Distinctively Scottish Solution?

Anthony P. Cohen

The latest offensive against universities by a Conservative Prime Minister in Westminster will also impact directly on Scottish universities, especially in the humanities and social sciences from which the U.K. government is withdrawing teaching funds, and because of their increasing restriction of research and postgraduate funds to select universities. The coalition government"s policy presented Scotland"s political leaders with the opportunity to distinguish themselves from their U.K. peers by acknowledging the strategic importance of universities and advocating a creative policy for their future development and enhancement. So far, they have spurned the opportunity. With regard to higher education, the 2011 election manifestos were implausible; while the SNP government"s pre-election consultative paper, calling for a distinctively "Scottish solution", was at best an unsubtle device to delay any serious consideration until the election had been safely negotiated. It is not credible that the Scottish university system can be both sustained and enhanced without a secure means of generating additional funds. The government's proposition of £93M as the additional sum required to bridge the probable funding gap with English universities is wishful thinking. It has always been obvious that it would be much greater; perhaps three times that amount or even more. How could a Scottish government, struggling to manage a diminishing budget, find that kind of sum recurrently without robbing other priority services? By rejecting any form of graduate contribution, the government has boxed itself into a corner from which escape will be politically tortuous – witness Nick Clegg"s plight. The funding deficit may well have grown to an extent which is beyond their ability to redeem it. If ever there was a moment for the universities themselves to chart a way forward, this is it.

But in order for them to do so, they will have to resolve some fundamental contradictions at the core of the Scottish university system.

- (a) The universities are legally constituted as autonomous bodies. Yet, they depend to a greater or lesser extent on government funding, and are regulated by government or its agencies in almost every aspect of their activity. In reality, autonomy is a chimera. If recognised as such, one of the abiding obstacles to rational, systemic collaboration could be overcome.
- (b) The funding methodology for the entire university system is based on the fictitious proposition that all universities are alike. The brute fact is that the system is as stratified now as it was before the 1992 legislation which transformed the polytechnics and centrally-funded institutions into universities. Indeed, the fiction has perpetuated, indeed reinforced the binary line.
- (c) The Scottish government has retained a supposedly "arm"s length" funding council to distribute funds to the universities which are also accountable to it. However, the independence of the Scottish Funding Council (SFC) from government has been steadily eroded; and, under the first SNP administration, disappeared completely. This fiction of independence would matter less if the government did not deny it. There are crucial negotiating mechanisms -- the Joint Futures-Thinking Taskforce; the Tripartite Group which are constituted on the pretence that the SFC *is* an independent body, mediating between the government and the universities. This pretence keeps the universities permanently in the minority on these bodies.

- The government should either make the SFC genuinely independent a most unlikely eventuality or it should explicitly take the functions and responsibilities of the SFC in house, and deal directly with the universities.
- (d) The governing bodies of universities are supposedly responsible for university strategy. In practice, they are not competent to do more than approve or reject the strategy formulated by the Principal and senior management. Governing bodies are overwhelmingly weighted to their lay non-executive members, most of who, highly expert in their own professional fields, are appointed with no or little expertise in or experience of higher education. The present position is unsatisfactory, both for lay members and for the executive; it does not effectively safeguard the good governance and strategic direction of universities, as is evident from some recent events.

These four structural anomalies and contradictions are inextricably interrelated.

Stratification

For years we have described the Scottish university system as "diverse". This unconvincing circumlocution cannot mask the brute fact of its stratification. The seven "post-1992" universities are not properly comparable to the older institutions. They may be good, even very good, at what they do – but their strengths are markedly different from those of their older siblings. Because they have always been denied the funds to develop their research capacity, they have never been able to compete on equal terms for (research) Quality Related (QR) funding, and therefore have been driven to depend increasingly on teaching-related income, the sources of which include international partnerships and activities which, desirable though they may be, are extremely onerous. They have also had to move away from the older academic disciplines which they professed before 1992, towards vocational and new professional fields. The lack of any significant QR funding impacts directly on the levels of general provision in the new universities: libraries, support services, postgraduate facilities, cultural and sports amenities and so forth. These universities generally have to dedicate proportionately more resource to supporting their students" learning.

But the division is not just between the "old"and "new" universities. There is also significant stratification within the "old" university sector. Over the last twenty years Edinburgh has grown beyond the other institutions in almost every respect. It is now the largest university in Scotland by some distance – and about to grow even bigger following the merger with the Edinburgh College of Art (ECA); the richest, with the biggest endowment, and generally the most successful academically and in respect of commercialisation. Edinburgh is the only Scottish university which retained a place in the top one hundred in the 2010 Times Higher world university rankings, although it slipped twenty places. Now clearly in a class of its own in Scotland, Edinburgh achieved critical mass in terms of its size and recognition of its research quality across its disciplinary spectrum, both of which have eluded its Scottish competitors. Glasgow, which only twenty years ago was Scotland"s biggest university in terms both of size and government grant, is struggling very publicly to reverse the decline in its fortunes. The other "Ancients" and older universities may have become increasingly successful academically, but are unable to grow to the size at which they could achieve the necessary critical mass.

The entire system is now under acute financial strain. In 2011-12, the university system will suffer a 7% cut in government grant, an unprecedented reduction which can only exacerbate the dire situations of those institutions already coping with deficits.

In 2003 – a time of relative plenty – a distinguished Principal described the Scottish university system as just "muddling through" – a condition which made strategic planning difficult and the maximisation of our academic strengths impossible. Universities have exercised considerable ingenuity to increase their income: research pooling; international activity of various kinds; commercialisation, knowledge transfer and so on. But for most universities, this is now unlikely to be sufficient. A really radical approach is needed to enable universities not just to cope with reduced public funding, but to flourish sustainably. Just muddling through, always undesirable, is no longer an option.

Collaboration

The "new" universities: One particular aspect of the stratification of Scotland"s university system is at the centre of my concerns. The reality of funding for the post-1992 institutions is significantly different from that of the older universities because it is so heavily weighted towards teaching income, and largely excludes research. The reasons for this go back to the legislative transformation of the former polytechnics in 1992, accomplished financially by driving down the unit of teaching resource, and excluding new funds to develop research capacity which would thereby have enabled these new universities to compete for their share of QR funds through the Research Assessment Exercise (RAE). The gap in the ratios of QR (research) funding to "T" (teaching) funding between the old and new universities has remained virtually unchanged since 1992; and must now be regarded for practical reasons as unbridgeable by means of a funding intervention. Therefore, alternative means must be found for their development.

This deficiency in the research capacity and activity of the new universities has a direct impact on the Scottish business and service sectors to which these universities are orientated. I am convinced that the only practical means of addressing this problem is through systemic collaboration across the sector to form joint graduate and research schools; to share some highly specialised staff; to permit students to choose some of their modules from the curricula of other universities; to share very expensive specialist facilities and some strategic and operational management functions.

The suggestion that the post-1992 universities might focus on teaching to the virtual exclusion of research is detrimental. First, the quality of teaching at university level depends on active scholarship and research. Second, these universities are responsible for many disciplines, especially in health and related areas, and in aspects of management and business studies and in the creative arts, which lack well-developed research bases. The "new" universities therefore have a special responsibility to develop the science foundations of these subjects that will in due course impact directly on practice to the benefit of society. Therefore, the Scottish Government *must* abide by the commitment made by the Joint Futures-Thinking Task Force to ensure that all Scottish universities are research-active.

Systemic collaboration among the new universities should be the default position for every aspect of their activity. This part of the university system is congested, under-funded and under-valued. It is often suggested that the solution would be to merge institutions. But the merger of multi-disciplinary universities (as opposed to universities with monotechnics or specialist higher education institution (HEIs)) is inappropriate, a very expensive and very protracted means of taking value out of the system. Collaboration among a group of institutions would be a much less costly alternative which would sustain autonomous institutions in place.

Such a collaboration would take much hard work and commitment, both to establish and to maintain; but it could achieve critical mass in areas where it is presently lacking, would liberate funds which could be reinvested in building academic strength, and would create a truly distinctive, attractive and efficient system for Scotland, and one which could balance and cooperate fruitfully with the older, "research-intensive" sector.

The research-intensives: The original research pooling initiatives recognised the problem of funding capital-intensive subjects in the natural sciences, and the virtue both of sharing very expensive facilities and of maximising critical mass for research activity at postgraduate and more advanced levels. The physics initiative, in particular, demonstrated the efficacy of sharing resource as a means of leveraging substantially increased research funding. The later pools seem to have been less successful, partly because they lacked the necessary investment; and, perhaps as a result, because they failed to overcome the primacy of commitment to individual institutions. As the UK research councils move to concentrate their funding and postgraduate studentships, there is an urgent need for the older universities to be proactive in fomenting collaborative arrangements.

Funding and governance

During the first half of my university career, university funds were administered through a genuinely arm's length body, the University Grants Committee, composed largely of academics; and for some of that time were distributed on a quinquennial basis to permit genuinely strategic planning and development. Of course, this was before the days of the RAE, of the Quality Assurance Agency (QAA), the funding councils, the Higher Education Academy (HEA), Higher Education Statistics Agency (HESA), and the plethora of other expensive regulatory and monitoring bodies, all of which consume funds which could otherwise be spent more fruitfully on the front line. Ironically, regulation, audit and monitoring have all increased, while the universities" dependency on government funding has decreased. The political demand for accountability has acted as a proxy for governmental control which is now all pervasive. Scottish administrations have been no less eager than U.K. governments to control universities. The last Labour-Liberal Democrat coalition merged the higher and further education funding councils, diluting the ability of the universities to influence policy, and to no obvious benefit. The SNP government has wholly co-opted the Funding Council, issuing even more prescriptive annual ministerial "guidance" than their predecessors.

There are stark differences between the Scottish Funding Council and its equivalent body in England, the Higher Education Funding Council for England (HEFCE). Chief executives of the latter have always been senior heads of institution. The SFC has preferred civil servants. Indeed, during much of my time as a Principal the executive of the SFC did not include any individual with senior management experience in a university. The Board of HEFCE always includes serving heads of institution; under its present Chair, and departing from earlier practice (of including a serving Vice-Chancellor from an English university, but with a close Scottish connection), the SFC does not. The inevitable consequence in Scotland is that the Funding Council has understandably been viewed by the universities with less trust and confidence than could otherwise be the case. It is hardly surprising, then, that the universities have long resisted the aspiration of the SFC (indeed, also of its predecessor body, SHEFC) to play a strategic role. And yet, faced with the funding crisis and the absence of plausible proposals from the Government and its Labour opposition about how it may be surmounted, strategic leadership is needed now as never before.

This need extends also to the universities themselves for which, as I have argued above, their governing bodies – like the Board of the SFC predominantly lay bodies - seem to me to be ill-equipped. As well as being responsible for the university sprobity and good conduct in every respect, the university courts also see themselves as the stewards and guardians of their university sputative autonomy. The duration of their responsibility is limited – as it should be – according to national governance principles, and lay members may therefore understandably feel inhibited about encouraging Principals to pursue long-term and radical strategic action which may appear to be at odds with the university sautonomy. During years of discussion with several of my fellow Principals about a programme for collaboration, we all felt constrained by the difficulty our Court members had in coming to terms with our suggestion that we move away from the conventional model of inter-institutional competition towards collaboration.

Their scepticism was not surprising. The SFC"s funding methodology, largely formulaic, is predicated on competitive performance indicators (PIs): RAE scores; student numbers; research income and knowledge transfer metrics, and so on. The funding body has always looked sceptically at funding cross-institutional projects, other than on an *ad hoc* basis, and then usually only for projects of its own devising. The tail of the funding methodology wags the strategic dog. To a lay-dominated governing body, the risks of challenging the *status quo* must therefore seem obvious. This strategic inertia must be broken in order to move from the logic of competition to that of collaboration.

My proposition is that collaboration among institutions, while reducing costs and optimising the use of limited resources, also enhances academic activity. It is the means by which we can sustainably do more, possibly much more, with less. And less is what we know we will get. I have persistently argued the case for collaboration in Scotland for twenty years, with a notable lack of success. The undesirable alternative now would appear to be the inevitable contraction and impoverishment of our university system.

How can Scotland take best advantage of the resource of part-time learners and ensure equity in funding arrangements between full and part-time students?

Sir Andrew Cubie

The elections to the Scottish Parliament last month delivered a resounding success to the Scottish Nationalist Party in their representation in the Scottish Parliament. This is a quite remarkable achievement. As one who served on the Consultative Steering Group which set up in 1999 the working arrangements of the embryonic Scottish Parliament, the majority held by one party, as now exists, was never fully contemplated. Much has been written of this in the last few weeks and its possible implications. It seems to me, despite the challenges of financial constraints for the Scottish Government, there are areas where government can address areas of inequity more easily than in the compromise of coalition or minority. One such is in regard to the circumstances of those who study part-time in Scotland.

I have previously spoken at David Hume Institute events about the funding both of full-time students and the institutions they attend. My views about both the equity of and need for a graduate contribution by Scottish graduates are well known. My attitude after the election has not changed. Indeed, the pressures to ensure the adequacy of funding of Scottish Universities simply develop day by day. Those pressures, whilst significantly resting upon the Vice Chancellor community and their Governing Bodies, clearly spill intensely over to the Scottish Government. Part of that pressure relates to the provision of adequate support to allow the broadest access of full-time students to Scottish Universities. I have also written much about this need in the past, but wish for the purpose of this series of articles to refer to the position of part-time students.

Scottish part-time higher education students have always paid tuition fees – up front and largely out of their own pockets. Many of them choosing to study part-time to accommodate work or their commitment as carers, or because their own health means it is the only, as opposed to the best way, to study.

Indeed, while all the political parties in Scotland prior to the Election, with the exception of the Conservatives, sought to reassure Scottish students that full-time higher education would remain free for the foreseeable future, no such promises were made to the 74,000 Scots who study part-time.

This enormous group of students will wonder when this broad consensus that the "democratic intellect" must be preserved by ensuring that access to higher education is based on ability to learn – rather than ability to pay – is going to be extended to part-time students.

Increasingly, the distinction between full-time and part-time students becomes blurred. For many, if not most, in full-time study, term time remunerated employment is the norm, not the exception. I well recall from the research which supported the "Cubie Committee" that full-time students with paid termly employment up to 12 hours per week saw grades improve, but beyond that their attainment declined. Where does a logical boundary lie between full and part-time study. Clearly not in funding!

Part-time study permits so often those of ability to achieve potential later in their lives than their peers. It is no coincidence, sadly, that the majority of part-time students are female.

Much is properly made of the equity which should accompany study in Scotland, but I suggest that looking at this majority group as a society we have a responsibility to make their learning journey easier, not harder.

For Scotland"s economy to grow, higher education needs to be accessible to all those who can benefit from it, not just young people leaving school who will attend university full-time. Our economy, particularly those growing and emerging sectors that depend on a highly skilled workforce and world-class research and innovation, relies not just on a steady stream of young graduates but, crucially, also on people willing to take their skills and qualifications to a higher level and at a later date.

As the Leitch Review pointed out, 70% of the 2020 working age population have already left compulsory education and, with an ageing population, the flow of young people into work will reduce over time.

Meanwhile, studying while in employment, must be a gain both for the student and their employer. A new or enhanced qualification will boost an individual's career prospects in the long term, while their newly gained skills and knowledge can be immediately applied to the workplace. It also works the other way: they help shape the whole community of students through bringing their knowledge and experience from the workplace to the curriculum.

Part-time study is by no means the preserve of people returning to learning later in their lives and careers. The significant rise over the last five years in the number of people aged twenty one or younger studying with the Open University should alert us to the fact that more young people are actively choosing to "earn while they learn". The rise in demand for more flexible higher education provision from young people may also highlight an increasing recognition by students of the career benefits to be gained by applying newly acquired skills and learning to their current job.

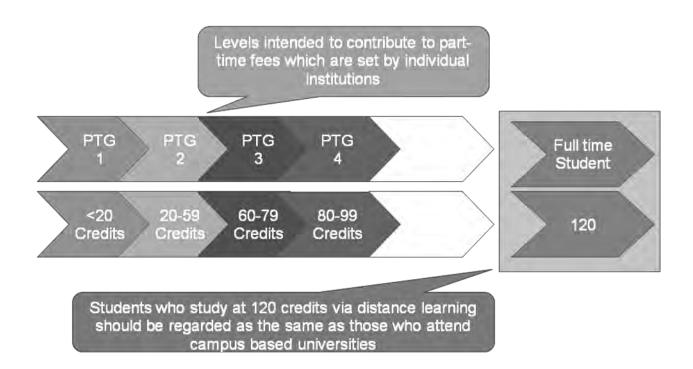
Realistically, for many employees, a return to study will only be an option if they can fit their learning around their employment (and family commitments). It is worth pointing out that many working people may not need to embark on an entirely new qualification in order to upskill, but can choose simply to take a selection of modules from degree courses to top up existing qualifications. If Scotland accepts that the needs of the economy will increasingly rely on people already in employment returning to education to increase their skills or develop new ones over the course of their career and encouraging those not in employment to consider higher education, what can we do to allow them to realise their ambitions?

As part of the current debate on higher education funding we should review whether here is a more effective way to provide a greater contribution towards tuition fees to a wider group of people studying part-time.

The Open University has interestingly offered a revised use of existing funding for part-time students in part based on the report published by "Biggar Economics – February 2011 – A Funding Model to incentivise Part-time Study". This would proceed on the basis of a credit based funding model to support learners move between different modes of study and institutions. In principle, a credit based funding model has attractions, but as Chair of the Scottish Credit & Qualifications Partnership ("SCQF"), I would caution strongly against a simplistic view that as we have in SCQF a world regarded structure and approach, it was not conceived as, nor does it operate as funding model.

The model suggested by the Open University is reckoned to provide a budget-neutral means to incentivise flexible study. It is as follows:-





A graduated Individual Learning Account (ILA) scheme which builds on the current system would provide individuals, studying below full-time intensity at a Higher Education Institution (HEI), with a payment to buy different amounts of credits for higher education, based on an individual's income (less than £30k) and their level of study intensity as outlined in the above diagram.

The independent report by Biggar Economics¹ has demonstrated that the cost of the proposed scheme would be less than £10M a year, assuming there was no change in demand for part-time study. Even if the proposed scheme generated a 25% increase in demand for part-time places, the proposed scheme would only cost £15.4M a year – a figure which assumes none of the increased demand would be diverted from full-time higher education.

There are currently a number of different funding streams spread across different agencies, which offer part-time students on low incomes support towards their tuition fees, or provide HEIs with funding to incentivise the growth of part-time provision, as outlined below. By merging these funding streams, it is suggested that there would be sufficient income (£24.7M) to fund the proposed scheme.

¹ A Funding Model to incentivise Part-Time Study Biggar Economics February 2011

Funding streams for part-time study 2010

	Budget	Eligibility	Budget
	holder		(2010)
$ILA 500^2$	Skills	Individuals with an income	£12M
	Development	below £22,000	
	Scotland ³		
P/T Fee	Scottish	Individuals on benefits or low	£3.7M
waiver	Funding	income households	
	Council		
PTIG	Scottish	HEIs based on the number of	£9M
	Funding	part-time students	
	Council		
Total			£24.7M

I would suggest serious consideration should be given to these suggestions. However we may move forward, we do need to find effective ways to incentivise better our part-time student community.

For the individual, studying part-time in parallel with employment can offer a cost-effective mode of study, provided it is properly supported. However, minimising the cost to the individual is only one part of the equation. Making it easier for people to dip in and out of higher education and to study at a pace that fits around their work and personal circumstances means taking a hard look at the way that we fund *institutions* - as well as how we fund individuals. Universities should be also incentivised to provide the flexibility demanded by people who choose not to study full-time – or cannot do so, due to other commitments.

The current funding system works against those universities that want to offer students a greater choice about the level of intensity at which they study, or want to move away from rigidly classifying their students as "part-time" or "full-time".

Achieving greater flexibility within the sector featured strongly in *Building a Smarter Future*, last year"s Green Paper on higher education and many of the consultation responses published - including those from CBI Scotland and the STUC - support this ambition.

While the current debate on higher education has focused almost exclusively on how it is paid for, not many seem to be asking equally important questions about whether our higher education system delivers the kind of flexibility that meets the demands of today"s economy and tomorrow"s students. The Scottish Government needs to look beyond simply the needs of young people in full-time higher education and grasp the thistle of ensuring our universities meet the requirements of all students. I doubt any would challenge such a proposition. Let us all work together to see how this can be delivered more effectively than presently.

² ILA 500 is to be rebadged as Part-time Fee Grant from April 2011

³ Moving to SAAS from April 2011

How did it come to this – and what are we going to do about it?

Jim Gallagher

Higher education is one of Scotland"s success stories. How have we reached the place where Scotland"s devolved politicians refuse to allow it to raise the funds it says it needs to thrive – and instead demand that it be dependent on the public purse? And what is to be done about that?

Land of the Free?

Devolved Scotland"s love affair with making things free was only a flirtation at the start. The Blair Government was introducing student fees for England, but in the first coalition negotiations in 1999 the Scottish Liberal Democrats sought to preserve free higher education north of the border. The carefully negotiated compromise of a graduate endowment – worked out in substance by the Cubie Committee – walked and quacked like a deferred fee, albeit what now looks like a small one.

But devolution coincided with the longest sustained period of growth in UK public spending and Scottish public services were well funded – something like 20% higher per head than comparable English ones. Generating income through unpopular charges hardly seemed essential. Lib Dem pressure lead to free eye tests. Henry McLeish was keener to differentiate himself from English Labour than Donald Dewar had been, and to offer popular policies. He found his opportunity in free personal care for the elderly. Concerns that the effect was to subsidise the middle classes, as the poor already received care free, were dismissed, as were warnings about the long term affordability of the project. English Labour Ministers were put under uncomfortable pressure, and the Chancellor of the Exchequer refused to allow the Scottish Budget access to the resultant savings made in attendance allowances.

McLeish"s successor, Jack McConnell, found enough money to extend free bus travel for the over 60"s from a local initiative to a national standard. Although billed as allowing old age pensioners the freedom to travel without concern about costs, it is available to all over 60, including those in full time employment.

These crowd pleasing initiatives were by no means confined to Labour or Lib Dem Ministers. Nationalism and populism have made comfortable bedfellows. The SNP minority administration which took power in 2007 made more things free. The graduate endowment was abolished – though even this administration shied away from the pre-election promise of writing off all student debt. Looking around for other charges to abolish Ministers saw scope in the tolls on the Erksine, Tay and Forth road bridges, following the decision to buy out the unpopular PFI contract on the Skye Bridge and make it free also. This coincided neatly with the conclusion that it was time to replace the Forth Bridge. By the end of the 2007-11 Parliament SNP Ministers had also abolished all prescription charges.

12 years of devolution, under all parties, have indeed made Scotland indeed a land of the free. The newly re-elected First Minister sees it as a defining principle of the Scottish Parliament. In its Chamber on 26 May he said "Free university education, no tolls, no tax on ill health and one bill – the council tax- that will not soar: that is the concept of the social wage"

Scottish Political Culture

What does this tell us about the political culture of devolved Scotland? A cynical view might be simply that we see political parties, in times of apparent plenty, seeking to buy popularity from voters by straightforward give-aways. The remarkable level of unanimity in the 2011 devolved elections that free provision was untouchable, even in a spending downturn, might bear this out: most parties rushed to avoid any risk of unpopularity by suggesting that student fees might be introduced – and none even hinted that free personal care for the elderly was other than sacrosanct.

It is well established that the middle classes benefit disproportionately from non-means tested benefits or services. If all can benefit, those with sharp elbows will be sure to take their entitlement to things that they might otherwise have paid for. This is not however always an argument against universal provision. It may be a price worth paying to ensure take-up by those most in need, or there may be other benefits – such as the social solidarity from free universal education. It is clear however that the two most expensive free pledges in devolved Scotland have been especially kind to the better off. Personal care was already free for most elderly people: only the better off were asked to contribute. A significant result of the policy is that the children of home owners now have a higher chance of inheriting unencumbered property from parents whose residential care has been funded by the state. University education is now available to a much wider range of young people than a generation ago – but it is still dominated by the better off. In practice, Scotland"s newly free services have been a preferential option not for the poor, but for the comfortably off.

Are we nevertheless seeing here the outworking of left of centre principles in a country that sees itself as more socialist or at least social democratic than the UK as a whole? Is the determination to offer public services without charge and so with no regard to means the practical expression of protecting Scotland from the right wing Conservatism of the 1980's? Scotland's two largest parties present themselves as left of centre and social democratic and so, they say, in line with mainstream Scottish opinion.

Certainly Conservatism still struggles in Scotland. The party which once won the majority of the seats and votes in a Scottish General Election (admittedly as long ago as 1955, and in quite different circumstances) returned one MP to Westminster in 2010. Traditionally Tory areas – with demographics that would mark them out as safe seats in England – return SNP or even Labour members. The historian Tom Devine suggests that Scotland remains in a long reaction to the effects of the unbridled capitalism of the 19th and first half of the 20th century.

But times move on, and social attitudes with them. In many respects the views of the Scottish population move in step with those in the rest of the UK. Scotland is somewhat more social democratic than England, as data from the British Social Attitudes survey shows⁴. This shows most in relation to health and education. 41% of Scots think it is wrong that people can buy better access to these services, compared to just over a quarter of the English population. This is the most striking difference in public opinion on these issues, but is obviously not a majority, even of Scots. On other indicators, such as a desire for increased taxation and public spending, Scots are only slightly more positive than the English. Over the last ten years, like the whole of the UK, they have become rather less social democratic in outlook.

⁴ John Curtice, presentation at Institute of Governance Seminar, Edinburgh 8 Feb. 2011

So the comforting national myth of a social democratic Scotland is based on shakier foundations that are realised.

Public opinion on student fees is quite different from what might be inferred from the political parties" stances. A You Gov poll in 2011 for the Scotsman newspaper showed that two thirds of the population supported some graduate contribution to the cost of higher education. Asked how any gap in the funding of Scottish Universities should be filled, as many thought that any should be filled by student contributions as by government. More striking still, Scottish Social Attitudes Survey data⁵ show a clear trend here. In 1999 40% of Scots thought that students should pay no fees, but by 2010 only 20% took that view – virtually the same as the English population.

For Scottish politicians of a left leaning disposition, these issues present a worrying challenge. Perhaps the decline in support for broadly social democratic propositions like more tax and spend reflects 10 years of increasing public spending. During the three Scottish Parliaments dominated by (at least purportedly) social democratic parties we have seen more expensive public services, but no discernible lessening of inequality: and £1bn a year invested in making services free has largely helped the middle classes. A social democratic offering that consists simply in making more services free has certainly not pulled Scottish opinion in a different direction from England's.

The challenge to politicians is most acute in relation to student fees: here the largest parties are out of line not just with majority opinion, but with its trend. Scots clearly believe in free health care, and are markedly more committed than the English to a state schooling system. Why might University education differ?

Is there a progressive case for fees?

It is easy to produce a caricature of a right wing argument for University fees. It is also entirely possible to make a pragmatic case for them: what can be afforded from the level of taxation which is acceptable is not enough to support top-class universities. It is worth however remembering that they were introduced, and subsequently increased, in England by a Labour government. Is there an argument from equity for charging fees in some form? Is that why they are more acceptable to Scottish opinion than, say, co-payments in the NHS?

First and most obviously higher education is not a universal service, even with participation rates nudging 50%. More pointedly, it is, despite significant efforts to widen access, still dominated by children of the better off. Three quarters of Scottish students are from the top three social classes. 13% have been privately educated, even though independent schools teach only something over 4% of Scotland schoolchildren. So free higher education significantly *favours* the better off.

Secondly, higher education also *creates* the better off. Investment in higher education is good for the economy generally, but it is especially good for graduates.

o ibid

⁶ Sources: HESA PI's 2008/9; Scottish Government, high level statistics trend March 2011

The Browne review⁷ summarized the evidence thus "Over the course of a working life the average graduate earns comfortably over £100,000 more, in today"s valuation and net of tax, than someone with A levels who does not go to university."

Why should this benefit come free? There are two arguments. The first is essentially timing: students cannot afford fees when studying, and so those without wealthy families will be deterred. The second is uncertainty. Not all graduates may do well, and those who remain less well off may be saddled with unaffordable obligations. It is not however obvious that abolishing fees for those who are already well off or will become so is the only answer to these objections.

Some fiscal realities

Scotland's love affair with free provision happened at a time when Scottish public spending has increased hugely. It has therefore been possible to remove charges without cutting services. But serious concerns have been raised about whether this is affordable. In a report which MSP's could not controvert and so largely ignored, the Auditor General pointed out that the abolition of charges cost the Scottish Budget nearly £1bn a year and was set to grow. Free personal care for the elderly especially would inevitably increase rapidly in cost as the number of frail elderly people continued to grow.

The financial crisis from 2008 has made clear that the growth in public spending that we have experienced since devolution was not sustainable: we have been spending fairy gold, and it is melting away. None of the Scottish parties (save, to their credit, the Conservatives) has been willing in a pre-election period to acknowledge the reality of this, and none is willing to reverse the changes. Lib Dems put a tiny toe in that hot water by suggesting that the age for free bus travel might be raised for future users.

"Flat cash" is the reality of budgetary life for Scottish public services for at least the next four years, while tax revenues are being used to pay down public debt. The pre-election budget figures published by Finance Minister John Swinney gave all programmes other than health no cash increase at all. They were described as "illustrative" and indeed they illustrate the problem well. No cash increase at all is not a sustainable position for Scotland"s Universities, when compared with the growth available from fee income available to their English competitors.

The size of the "gap" is variously debated, and depends on a number of assumptions and the behaviour of English Universities. Anything from £90m to £250m has been suggested. During the election campaign promises of varying strength were made that the gap would be funded. It represents an additional 20% or more of the current funding available and it could only be found by significant reductions in other programmes. To get a sense of scale, here is roughly what £200m of savings could involve:

- A 10% increase in the council tax (which all parties want to freeze), or
- About 5000 fewer police officers, or
- No inflation provision at all for the NHS, or
- Halving the housing budget.

⁷ Independent Review of Higher Education Funding and Student Finance: 12 October 2010.

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⁸ Scotland's Public Finances: Preparing for the Future (November 2009)

Digging out of a hole

Free University tuition is, perhaps surprisingly, out of line with majority Scottish opinion. Nor is it likely to be affordable without serious effects on other programmes or on the HE sector itself. Despite some extravagant rhetoric⁹ it is hard to see this as a long term sustainable policy, even for a majority administration that has no need to compromise to get its budget through. Something which can't go on forever will at some point have to stop. How can this be managed with the least possible harm to students, institutions, other public services and the economy generally – and maybe even politicians" reputations for veracity?

Here are nine and a half potential elements of a solution:

A piece of swift process: while there may be a degree of political consensus on what is not to happen, there is none on what should be done. Universities are already struggling with this year's settlement, with redundancies declared and cost reduction plans being implemented, to much political distress. That will continue until there is a clear path agreed to a sustainable level of funding. For this sector that is more than just a decision on budgets and volume and ever more heroic assumptions about "efficiency gains", even though the latter must play a part. There needs to be a swift and decisive debate about what sort of HE sector we want and how we can afford to pay for it.

It would be harmful to plunder research funding to support free teaching: we look to our universities and colleges to provide two economically valuable things: world class research (and Scotland is fortunate to have a remarkably good share of that for so small a country) and the education and training of an increasing share of our population to more advanced standards. But it would be close to madness to destroy our capacity for the former simply so as to meet ill thought through commitments to make the latter free. For the long term success of the nation priority has to be given to preserving one of its remaining world class assets – an excellent HE sector. Plundering research funding would be exactly the wrong thing to do.

Look at student support in the round: rhetoric about free higher education is misleading, if not actively dishonest. Students already contribute substantially to the costs of getting a degree by supporting themselves through it. They have of course (some) discretion over how much to spend, but many use student loans to meet living and other expenses. These cost substantial sums of public money, for two reasons. First, the loans charge a zero real rate of interest. This alone costs about £70m a year. Second, because the loans are (rightly) not to be repaid until graduates earn over a certain threshold, a public spending allowance is made for potential non-payment at the time they are disbursed (the "RAB" – Resource Accounting and Budgeting – charge). If the priority is zero or low tuition fees, there is scope to reduce public spending to finance it on each of these elements:

• A blanket interest subsidy is an inefficient way of supporting less well off students or graduates. While the days of rich students earning high interest by depositing their loans with the building society may be over, there is no case in efficiency or equity for supporting all students in this way.

⁹ Tuition free "till rocks melt wi" the sun" according to Alex Salmond, even, it seems, if the seas of public spending gang dry.

• It is absolutely right that repayment of student loans is contingent on income: that removes the problem of uncertainty at the point of decision for students, especially poorer ones. But it is not self evident that the cost of this be borne by the taxpayer: it could be borne through the interest cost of the loans themselves – just as bank borrowers in effect pay a premium on commercial loans which covers the cost of borrower default. To manage this risk effectively the Student Loans Company might choose to insure this debt on the markets rather than carry the risk on its own books.

Reduce the cost to students of taking many degrees: the unit cost of higher education has over the last 10 or more years been reduced by a process akin to boiling a frog. Numbers have been steadily increased while resources have not kept pace. In one obvious sense this is an efficiency gain, but the gradual nature of the process has meant that no-one has taken a hard look at whether the pattern of education that was developed when 10% of the population went to University is the right one for a world in which nearly 50% enter tertiary education. It is not at all obvious that the pattern of teaching and terms that has its roots in a mediaeval agricultural economy is the right one for all students. The Open University offers a more attractive model for many degrees than Oxbridge, and much greater proportion of degrees should be either shorter and more intense – so cutting down students" living expenses – or longer and more articulated, so that they have more scope to earn, ideally in relevant work rather than in burger joints. There will also be scope for greater efficiency in the supply of support functions in Universities, as there is across the public sector.

Differentiate the sector more, not less: a corollary of this, which will be unwelcome to many in HE, is that the sector itself may need to become more differentiated – acknowledging more formally the reality that different institutions are discharging different functions, and research can benefit from being more concentrated. Teaching does indeed benefit from contact with research but there may be better ways of achieving that than spreading research jam thinly across institutions that then need to be incentivised to collaborate.

Be prepared to pay more for the best: even more indigestible for many in the sector, and for politicians, is the suggestion that better degrees should cost (someone) more. The experience of top up fees in England appears to suggest that few Universities are prepared to identify themselves as cheap and cheerful. This is clearly absurd, but it would not be surprising to see the same behaviour in any market driven system in Scotland at least in the short run. But the bald truth is that there are degrees which are more attractive in the jobs marketplace than others, often much more so. Unsurprisingly political opposition is likely be even more intense to "top up" fees than to flat rate ones. This is however both economically irrational and inequitable. Despite efforts to widen access, the most attractive courses, leading to the best jobs and highest incomes are even more likely to go to the children of the better off. Here is a simple suggestion: a loan surcharge for an identified list of courses and/or institutions, who meet high standards of quality, access and bursary provision, repayable not alongside ordinary student loan but when graduate income reaches an even higher level – say £40,000 a year.

Concentrate support on Scottish students: Ministers have woken up belatedly to the absurdity of the positions that free tuition applies not just to Scottish students but to EU students. This is both wasteful and objectionable.

Wasteful because other Scottish spending is being curtailed to the benefit of, say, Lithuanian students; and objectionable because other UK students in Scotland are discriminated against. No method has as yet been suggested to achieve this, as any scheme would require very fancy legal footwork. A further unhelpful aspect of the present arrangements is that they discourage Scottish students from studying in England or Wales – again unless they have families who can afford the fees. This too is an inequitable result for less well off Scottish student whose options are restricted, as well as a long term incentive to a new kind of kailyard. It would be worth considering whether the final suggestion below might help with these issues.

A new Student Support Trust: one way to help politicians out of the corner into which they have painted themselves might be to change the institutional framework to give Ministers a more strategic and hands off role in student support. An option might be a third sector trust, discharging many of the functions that Ministers currently deliver by their agency, Student Awards Scotland. Such a Trust could be a vehicle for philanthropy, receive grants from Ministers and be charged with using the funds, within broad guidelines, to secure within the available resources the fairest and most efficient access to higher education for Scottish students - wherever they choose to study – and it might not then have to educate EU students as well.

A dangerous thought: Scotland's rather lazy love affair with free provision is linked to its lack of fiscal powers. The rapidly growing Scottish Budget has been financed by revenues from tax decisions made in Westminster. Apart from local taxes, Scottish Ministers have not been able or required to make the choice at the margin between spending and taxation. If Scottish politicians really think that Scotland is and should be a more left leaning country than England they have been missing a vital tool. It is now clear however that additional fiscal powers are coming Scotland's way, notably those in the Scotland Bill. Courageous social democratic Ministers might be prepared to use their new taxation powers to put some money where their mouths are. A Scottish graduate tax does not look feasible but – for example – a 20% hike in Stamp Duty Land Tax might help balance the educational books. Raising money however is nothing like as popular as giving it away.

The Future of Higher Education in Scotland, its funding and links with business

Iain McMillan

The CBI's higher education campaign across the UK focuses on promoting a high quality, autonomous set of institutions providing world class teaching and research to a diverse range of students and businesses. CBI members believe that universities and businesses will need to work more closely together to ensure the UK's higher education sector continues to be envied around the world – a status which cannot be taken for granted in an age of widespread change.

At the heart of the current reform in England lies a substantial shift away from the current supply side model, in which teaching is largely financed by public funding directed through the university. This is to be replaced by a demand led approach, in which most of the money to pay for teaching will follow the student, by way of government loans. It will be up to the student to decide whether a particular course represents good value for this investment, which means that institutions will have to compete more vigorously to attract students and the funding that will come with them.

The CBI welcomed the emphasis placed on informed student choice and its implications for quality. Programmes that deliver for their students will flourish and those that don't will disappear. The recommendations are also progressive in nature, in that graduates on the lowest incomes will repay less than those on high salaries, and less than they do today.

The reforms will reshape the way that business, students and universities interact. CBI members believe business must be challenged to play a much more active role than it has in the past in informing students about its likely future needs; in helping them to choose the right subjects to study; in offering relevant work experience; and, where appropriate, in working with universities to develop courses that will provide attractive employment for graduates.

KPMG is one of many firms rising to this challenge, recently announcing its intention to sponsor 75 school leavers through a BSc in Accounting at Durham University. Meanwhile HP is launching a collaborative degree in computing with the University of the West of England, aimed at preparing its graduates for a successful career in industry. The CBI is exploring how this kind of activity can be promoted, with the aim that businesses large and small across the UK can benefit from working more effectively with universities.

At the same time, the CBI's focus will remain on core business priorities for higher education – top of which is the need to embed employability skills across the university experience. In collaboration with the NUS, the CBI will be launching a student employability guide in the first half of this year. Its practical focus will draw on a selection of best practice from across the sector, with the aim of informing students about the importance of employability and equipping them with the means to develop these vital skills.

The role of higher education has formed an important part of the CBI's focus this year on understanding and improving the attractiveness of the UK to make it the best place to invest. Universities are one of the UK's real areas of excellence.

Four of the world"s top ten institutions are located here and there are world class departments in many others, which together with the UK"s other strengths including our science and R&D base and flexible labour market, helps attract investment from both domestic and international companies. Higher education will also feature in CBI work in areas as diverse as the transition to a low carbon economy and the drive to develop the UK"s position as a world-leader in the creative industries.

Common to each of these sectors is a need for people with STEM skills (science, technology, engineering and maths). Employers predict growing difficulties in recruiting the STEM talent they need over the next three years, building on existing shortfalls. The CBI has called for business to work with schools, colleges and universities to tackle levels of participation and achievement in STEM which lag behind those of the UK"s competitors. A collection of case studies recently published on the CBI"s website provides a pool of best practice for employers and universities seeking to collaborate more closely.

In Scotland, the Higher Education Green Paper 'Building a Smarter Future' takes forward the debate on the future of funding for the HE sector and we will ensure that it remains centre stage.

For Scotland, high quality education and skills are essential in developing the future economic capacity of our country. So are world class research, development and innovation. This leads to higher paid employment prospects that aid the building of a more prosperous society. Central to this aim is the need for our higher education sector to be well funded and internationally competitive. Universities are a vital part of what Scotland needs to build economic prosperity and long term success. A high quality, sustainable higher education sector is of great importance to CBI members in Scotland.

The maintenance of high standards and quality of teaching and research undertaken by our universities is essential. We must also protect our universities" autonomy and ensure that their international competitiveness is developed further and not adversely affected by inadequate levels of financial support.

During the debate on Higher Education funding, the Scottish Government and Universities Scotland released their findings from a joint piece of work on university income. It was stated in the analysis that a net funding gap of around £93 million a year could emerge with the rest of the UK in 2014/15. However whilst the paper was a good and useful piece of work, the £93 million figure is at the lower end of the range of estimates presented and is controversial. Other estimates in the Scottish Government"s paper suggest that the gap might be around £200 million or more; with some in the Higher Education sector stating that this figure could be as high as £300 million.

Moreover, the paper only benchmarked Scottish HE funding against a range of funding positions in England. Our universities are international institutions and need to compete with the best universities in the world, to attract talent and students and also to continue to offer the best in teaching and research. So how Scotland"s HE funding compares globally is the real test that should be applied.

This is of serious concern not only to those within the business community but as we understand it also to those within the education sector.

The Scottish Government's paper on HE funding should be regarded as work in progress only and our politicians should avoid making rash promises that they may not be able to fulfil without signing a blank cheque or under-funding our universities into the future.

In order to mitigate the effects of this funding gap, our universities need to have access to new revenue streams. And while the CBI believes that higher education is a public good, in the sense that it brings broad benefits to society, it is also a private good because graduates generally benefit from earning higher salaries than non-graduates throughout their working lives.

Whilst we maintain that a university education should be "free at the point of entry" and reject the levying of a "graduate tax" on those who obtain an ordinary degree, we believe that the time has now come when some form of graduate contribution will be required in order to help deliver the funding that our universities need going forward. We favour a fee that is advertised up-front but which graduates pay back once they are earning £21,000 a year or more. We believe that this is a fair way of raising a contribution from those who benefit.

Scotland"s world class higher education sector faces urgent challenges, including the need to remain internationally competitive in the face of severe pressures on public funding. Business recognises that a credible plan to address this pressure is important and it is crucial that measures taken do not jeopardise the high quality teaching and research of our universities and their ability to deliver long-term economic prosperity in a highly competitive world.

Throughout the debate on higher education the notion of a business tax has been mooted in order to address some of the issues faced by the sector, including helping to close the funding gap. CBI members have identified that a business tax is not sustainable. However, there may be other opportunities for investment from the private sector. For example, the CBI has been working to increase business engagement in higher education, as shown in the examples above, and has produced various reports and case studies including "Stronger Together" a report focusing on the benefits of business-university collaboration.

One effective way of promoting this collaboration is through "third stream" funding, such as the Higher Education Innovation Fund (HEIF), a £150m fund in England designed to help universities innovate and draw in engagement with business. Whilst we are aware that the Scottish Government does not currently have the powers required to provide such incentives through the tax system, funding streams like HEIF are an alternative financial measure worthy of consideration. In a Scottish context, this might possibly be incentivised through the Scottish Funding Council Horizon fund.

The CBI believes that a real willingness to share services and collaborate in other ways is also vital in addressing the financial challenges that face the sector. Moreover, our higher education institutions need to be more business-like and bring fresh thinking as to how they can use their estates and intellectual assets to leverage additional income. For example, some universities in the US allow the general public and other civic organisations to use their premises. This generates additional income for the universities and could complement growing commercialisation of other kinds, which should be encouraged.

Our HE Task Force advocated a move towards a more flexible system, suggesting that institutions could consider whether teaching some courses over two years might be possible.

Rigidly committing to a four-year system seems to lack the kind of flexibility which is necessary if, for example, more employers are to use HE to up-skill their workforce. Clearly, while the four-year degree will remain core, there is no reason why some courses cannot be delivered over a shorter period and include work based and part time learning.

The next milestone in the journey of higher education reform will be when the newly formed Scottish Government spells out the detail of its plans. Regardless of the outcome the CBI looks forward to working with our business and university members to ensure that business priorities continue to shape the ongoing debate.

Back to Basics

Chris Masters

Promoting economic growth and increasing global competitiveness are high on the agenda of our national politicians, at least if their public pronouncements are to be believed and, over the years, universities have increasingly been seen as a key component in delivering these aims. From what one reads in the press or hears from various politicians one could be forgiven for believing that our universities, in addition to educating over two hundred thousand students from all over the world and producing world class research in a number of critical areas, are now also being handed responsibility for everything from reviving the Scottish economy to correcting social injustice in Scottish society.

In terms of economic growth, not only are they expected to produce world-class research, but they are also expected to predict its impact and take the lead in its commercialisation.

Let me be clear. I am not saying that commercialisation and related areas are not important, nor that universities do not have a role to play. I do, however, seriously question whether, particularly at a time when public funding is coming under increasing pressure, they should be encouraged and indeed funded so to do and whether resources tied up in such areas should be redirected to supporting what many would argue is the fundamental purpose of a university, namely;

The creation of knowledge through research and scholarship and the transfer of knowledge through teaching and publication

It is vitally important not to lose sight of the fact that, without knowledge creation, knowledge transfer rapidly becomes redundant and, without an educated populace, knowledge exploitation is simply a pipe dream. Access to knowledge, teaching people to think, giving people the intellectual tools to succeed and embedding a culture of lifelong learning, curiosity and indeed entrepreneurial ambition are, I would suggest, the fundamental components of long-term national success.

The role of higher education in supplying these fundamental components is absolutely vital and must be safeguarded at all costs.

We should be careful not to foist upon universities tasks which, although they may be willing to undertake, they are in many instances ill-equipped to deliver and which, if too actively pursued, could potentially damage their ability to deliver what they are uniquely able to deliver in terms of education and innovation.

In the corporate world there are many examples of companies having failed, or at least having done serious damage to their shareholders" interests, by excessive and ill-conceived diversifications often undertaken with the advice and encouragement of outside "experts". To mix metaphors, sticking to the knitting may not always be the most exciting option, nor an activity which will necessarily attract media attention, but taking the eye off the ball can frequently lead not only to an own goal but also to relegation.

Probably one of the most respected writers on competitive strategy and competitive advantage is Michael Porter of Harvard Business School and certainly one of the most authoritative and in-depth studies of what it takes for a nation to be internationally successful in today"s world is detailed in his major work "The Competitive Advantage of Nations" published in the early nineties. Based on in-depth, in-country studies of ten of the world"s leading economic nations, Porter and his colleagues concluded that:-

Skilled human resources and knowledge resources are two of the most important factors for upgrading national competitive advantage.

An educated population and a strong science base are not things which fall into the "nice to have" category. They are absolutely vital if Scotland is to continue to prosper in the global economy.

Nor are they things which fall into the "easy to have" category. An educated populace and a strong research base are not things which you can create overnight but they are attributes which can be seriously damaged without continual support and encouragement.

The number of high quality graduates produced and the international quality of the research are, in my mind, much better yardsticks of success than, for example, the number of spin out companies.

Producing high quality, commercially aware graduates and leading edge research are areas in which only universities have the essential skills and we should focus as much attention as possible on what universities are uniquely able to do rather than on what we might like them to do.

That said, I would suggest that the notion that all institutions will be able to maintain or achieve excellence in all they currently do is, even assuming the introduction of universal tuition fees, unsustainable.

In the corporate world the fact that over the last few decades we have seen the steady decline of the conglomerate and the concept of vertical integration is not simply a question of fashion. It is more a recognition of the fact that, to survive in today's competitive world, you have to be outstanding at what you choose to do coupled with an increasing recognition that it is extremely difficult, if not impossible, for any one organisation to achieve and maintain excellence by seeking to be all things to all men.

A greater diversity of mission amongst Scotland's universities, based on their ability to deliver excellence in their chosen fields rather than to deliver diversity of provision, would seem to provide a more sustainable and affordable model for higher education provision in Scotland at a time of increasing competition for scarce public and private resources.

There is no doubt that, both in the public and private sector, funding frequently drives behaviour. The proliferation of commercialisation departments and knowledge transfer initiatives in our universities is not unconnected to the availability of public funding to support such activities.

Similarly, the competitive nature and the magnitude of the research funding available from the various research councils and private bodies have not only driven quality enhancement but also resulted in the financial rewards available from demonstrating excellence in research considerably outweighing those available from demonstrating excellence in teaching.

While being extremely conscious of not introducing more funding bureaucracy, if excellence in teaching and research is to be more evenly valued by our institutions, and if an equality of esteem between the two is to be established, then a shift in the funding regime would appear necessary.

This is not an argument in favour of either teaching only or research intensive institutions but rather one which encourages and allows institutions to focus on what they are best able to deliver to the benefit of both their students and the economies in which they operate. However, in terms of both the student experience, particularly at undergraduate level, and the economic impact, in terms of the output of high quality graduates, many would argue that the teaching quality is just as relevant, if not more so, than the research rating. Irrespective of what eventually happens in Scotland, the introduction of tuition fees south of the border will result in students being more discerning in their choice of institutions and more demanding in terms of the quality of the offering. As even the most eminent and venerable of companies in the retail industry have learnt to their cost, not listening to the customer or getting the product offering wrong can have devastating consequences.

While I would be the first to acknowledge how important having access to scholarship and research is in informing and maintaining teaching excellence, I would question whether such access needs to be universally available in each individual higher educational establishment in Scotland. Similarly, do we really need Human Resources, Finance, Building Maintenance, Purchasing and Procurement and other similar support departments separately in all our individual universities?

Some ten years ago, the then Scottish Higher Education Funding Council promoted, as a response to perceived changes in selective research funding, the concept of research pooling. The basic motivation was simply one of survival. Looking across the sector, there were a number of research areas, particularly in the physical sciences, such as chemistry and physics, where Scotland lacked critical mass in any one individual institution. By effectively pooling the talent we had in Scotland, not on the basis of where an individual worked but on the basis of that individual's standing in the world of research and by persuading individual university principals to give up some of their autonomy in research to the pool, SHEFC helped to create "Scottish" research departments which have the potential to rival the likes of London's Imperial College in attracting not only research funds but also, most importantly, internationally recognised talent.

A similar initiative, focused both on teaching and institutional support functions, could not only release much needed financial resources but also raise standards. For the avoidance of doubt, such a proposal would not necessarily involve merging institutions or centralising services but rather pooling resources and establishing centres of excellence throughout the sector with the prime objective of maintaining and hopefully increasing quality.

In summary I would argue for;

An equality of esteem between research and teaching reflected in the funding methodologies

A greater diversity of mission between the various higher education institutions in Scotland based on the ability to deliver excellence in their chosen fields

A pooling of resources, both in teaching and support functions

We are very fortunate in Scotland in having an outstanding higher education sector. We have a resource which I believe will continue to serve the nation well provided it is set realistic and achievable goals and provided it is adequately **and** competitively funded.

The Future of the Scottish Universities

Andrew Miller, Carnegie Trust for the Universities of Scotland (CTUS).

From Erasmus, in his *In Praise of Folly*, to his literary descendants today – Tom Sharpe, Malcolm Bradbury, David Lodge and Laurie Taylor – it has always been easy to poke fun at the Universities with their eccentric professors and indigent students. Nobel Prize awards are paralleled by the Ignoble prizes for what are deemed the most fatuous research programs, usually conducted in universities.

Well deserved satire no doubt, but the Universities and their students merit a closer look. Of the seventy or so European Universities founded in the sixteenth Century, over 50 are still extant. Not many businesses have that record. So, if history is a guide, the future of the Scottish Universities may be secure because the Universities have proved able to adapt to meet the changing needs of the societies in which they have been embedded. The Universities evolve, by natural – or unnatural - selection, to fit the future, though a proud history is not a signal for complacency nor a guarantee of survival. This is particularly so at present in Scotland where there is deep uncertainty about the future of the Universities.

Higher Education – preparing students to think for themselves and give leadership in society - is the function of Universities. Universities are often depicted as airy fairy ivory towers, but a glance at curricula today show a strong representation of severely vocational departments of law, accountancy, architecture, engineering (mechanical, civil, electrical, electronic, chemical and biochemical), medicine, dentistry, veterinary medicine, agriculture, aquaculture and a host of other subjects which are strictly there to provide the brains and the skills for a technological and civilised society. The content and quality of these university courses are frequently monitored by an appropriate professional body.

Also in the university curriculum are courses on subjects which are not immediately preparatory for one of the professions - the arts and humanities, basic sciences, social sciences, pure mathematics. These subjects are emphatically educating the students who study them and a graduate in any subject should be better at telling when someone is talking rubbish.

Drop-out rates among Scottish undergraduates compare well with those in other countries, dispelling the indigent student image.

In addition to transmitting knowledge by teaching, Universities are also involved in creating new knowledge through research. Research is more independent of the professions than is teaching.

University teaching should be in the context of research. Current knowledge has transformed the modern world but it is always open to criticism and revision and improvement and students should be taken to the edges of their subject, made to examine and question the foundations of the subject and shown how knowledge grows. This research approach to teaching, no matter what the subject, is valuable for anyone embarking on any career.

These matters are not always evident in the present hubbub of talk about Universities and my point here is simply to say that while there are many esoteric academic subjects in universities, the essential functions are to prepare students for whatever life they choose and to further humanity understanding and appreciation of the universe and of itself.

To the question "Who should go to University?" Andrew Carnegie, in 1901, responded that any young Scot who is "qualified and deserving" should not be debarred from University because of financial constraints. Carnegie established the Carnegie Trust for the Universities of Scotland (CTUS) with an endowment of £2 million, of which only the income could be spent. This income in 1901 was just over £100.000 at a time when the total income from Government of the four Scottish Universities was around £70.000. So, overnight, Carnegie more than doubled the income of the Scottish Universities. In the following decades student numbers grew and the Carnegie benefaction paid for the establishment of university buildings, libraries, laboratories, student residences and sports facilities.

The Government income to the 15 Scottish Universities today is just over £1 billion. To have the same impact on the Scottish Universities today as the Carnegie gift in 1901, an endowment of some £40 billion would be required.

Carnegie decreed that half of the CTUS income should be used to pay students" fees and the other half should be used for the development of the Scottish Universities and this happened until 1948 when Government took over the costs of tuition fees. For various reasons, the £2 million that Carnegie gifted in 1901 had, by 1958, grown to only just over £3 million. In 1958, the Privy Council ruled that Charities such as CTUS could invest in equities. In 2007, the Carnegie endowment had risen to £68 million. Today it stands at around £60 million, after the crash of the finance markets, and the CTUS charitable expenditure is £2.2 million. CTUS steadily receives donations and legacies, mainly from past beneficiaries, and over the past 10 years this amounted to just short of £1 million.

The Trust now, in agreement with the Universities, deploys its limited funds strategically to assist the Scottish Universities and their students by a series of funding Schemes which offer a modest but valuable additionality.

Today 20% of CTUS expenditure is on the fees of undergraduates who are not eligible for Government aid, and on fees for one-year postgraduate taught Masters courses. The remaining 80% of expenditure is devoted to the development of the Scottish Universities. This includes a flag-ship scheme for post-graduate research Scholarships for doctoral students. This has a requirement that applicants have a first-class honours first degree and it attracts very highly gifted researchers. Other schemes support Visiting Professorships, Undergraduate Expeditions and Vacation Scholarships. In addition there is a busy Research Grants Scheme for academic staff and a highly competitive Larger Grants Scheme to foster collaboration, mainly on research, among the Scottish Universities.

The decreased financial significance of the Carnegie endowment now compared with in 1901 is not just because the investment did not grow for the first half if its 110 years, but because the scale and the cost of the whole higher education sector in Scotland has rocketed. The number of students has grown from a participation rate of a few percent to just under 50% and the number of Universities has grown from 4 to 15.

Can Scotland afford to support this enlarged sector or can it afford not to?

In principle, Universities could be funded from several sources – the Government, the students/graduates, charitable benefactions or the employers of graduates. All society benefits from graduates but the graduates themselves and their employers, benefit differentially. However, graduates and their employers already pay taxes to Government proportionally to their benefit. (i.e. their income).

Nearly all commentators – University Vice-Chancellors, the CBI and, as Andrew Cubie points out, even some student union leaders argue that, in order to allow the Scottish Universities to keep up with those in England and those wider afield, a student/graduate contribution must be added to Government support. At the 2010 meeting held by the David Hume Institute on Scottish Universities, Andrew Cubie and Neil Shephard also made the case for different types of graduate contribution.

However, the SNP which won a majority in the Scottish Parliament in the elections on May 5 promised in their manifesto, that there will be no students" fees in Scotland neither up-front nor deferred. This is in stark contrast to south of the border where the Browne Report proposed moving the burden of fees on to graduates, but there is no clear indication yet of where the costs of the universities will come from in Scotland.

At present, forty per cent of students are part-time and they are required to pay "up-front, fees. Most part-timers are mature students who are in work. They are either trying to improve their value to their employer or developing themselves. The Open University is heavily affected by this unfortunate ruling and it is to be hoped that the rule will be changed. Even if students are full-time, if they are doing their course by distance learning rather than attending at a campus, they are also required to pay fees "up-front".

In England, following the Browne Report published in 2010, the Westminster Government made what was essentially a policy decision to withdraw funding from much of the universities and to move a large chunk of the costs of university education from the Government to the graduates. Students will, from 2012-13, pay tuition fees, but these will be covered by a Government loan until after graduation and when the graduate is earning at least £21,000. Most students in England will therefore graduate with a debt of several tens of thousands of pounds. Does the Coalition Government really wish to cut student numbers?

At present, three quarters of the English Universities are saying that they will charge the maximum allowable fee of £9000. The Westminster Government had estimated that the average fee in England would be much lower and had budgeted for a lower figure. If the English Universities maintain their position, a funding gap will need to be filled in England. It should be noted that the £9000 figure is not a "top-up" fee. It is a replacement for a Government contribution. In England, the Government plans to withdraw Government support from most courses in the Arts, Humanities and Social Sciences. So Scotland will not be disadvantaged in the same way as it was when English Universities enjoyed "top-up" fees which were additional to government funding. However, since the Westminster Government is cutting expenditure (to help reduce the national debt exacerbated by the need to bail out some major banks, and the annual deficit left by the last Government) the knock-on effect for Scotland is that the Barnett formula will allocate less of the UK Budget to the Scottish Block grant and hence the Holyrood Government will have less money to distribute to the Universities.

Professor David Bell of the University of Stirling has warned that before the election, the main political parties in Scotland did not explain how the goals in their manifestos would be funded. In particular he is concerned that the SNP commitments to freezing the council taxes for the life of the next Parliament, to free medical prescriptions and to charge no fees for University students, will mean that in the rest of the economy there will have to be severe cuts which may be difficult to implement though John Swinney of the SNP, argues that efficiencies will be able to cope. Bell estimates that £300 million will be required to plug the universities", funding gap".

The need for reductions in public expenditure means that Universities will have to shoulder their share of the cuts and manage with around 17% less Government funds in the medium term future

This will be a substantial challenge to the Universities. Universities are in the curious position of enjoying a much vaunted and vigorously preserved academic freedom and autonomy as institutions, yet they rely substantially on the public purse.

A survey of the UK Universities" finances by the Times Higher Education magazine in April 2011 concludes that they are mostly, at present, in a healthy state. The average figure for a net surplus as a percentage of income is 3.1%. However, there are reasons to believe that all the major sources of income – direct public funding, tuition fees, benefactions and overseas fee income – could all be vulnerable in the near future. The Scottish Universities vary greatly in their dependence on state funding. The figures range from 27% to 71% for dependence on Government with an unweighted average of 45%.

This range of percentage dependence on Government funds is due to the diversity of activity among Universities. In addition to the core activities of teaching and research, some Universities invest heavily in student facilities such as recreation areas, art galleries or accommodation while others have less of these. Some have a high research income dependent on quality and the subject mix offered; others may stick largely to classroom based teaching and library or Internet based research. Some have rich endowments, others do not. However, the largest slice of the income of most universities has been the Government grant for teaching.

It is clear that the outcome for students and the Universities will be different in Scotland and England.

Students in both countries will not pay fees as students – hopefully the part-time anomaly can be remedied.

However, in England graduates will face debts and this may threaten the participation rates. Students" living costs must be considered too. Scottish domiciled students will welcome the fees regime. A key factor will be what fees are asked from students not domiciled in Scotland. At present students from south of the border are charged £1820 per year while EU students are not charged fees. There has been talk of increasing the fee for UK non-Scottish domiciled students to around £6000 and to asking students from the EU to pay a "service charge". These moves would bring in more money to Scotland, but a major unknown is the effect that these new fees/charges would have on the numbers of non-domiciled students attracted to study at Scottish Universities. There are 11% students in Scotland from outside the EU who pay full fees. 14% are from the UK, other than Scotland.

The effects on the Universities on both sides of the border will also be different. If the fees plan works – and this is not certain – then the English Universities could enjoy a better income than their counterparts in the north if they can convince the students to take on the debt.

In Scotland, things are really up in the air at present. There is a factor of three difference on what the so-called "funding gap" is to ensure a reasonable income to allow the Scottish universities to teach and research at appropriate standards. The SNP Government says the figure is £93 million or even less, while the Universities believe that up to £300 million is needed. Before the elections, representatives of the SNP said that they would award "whatever it takes" to fund the Scottish Universities properly. This is not a highly meaningful statement in the present circumstances, so the financial position of the Scottish Universities, as we write, is still in limbo, awaiting a Government announcement.

Lord Sutherland has recently pointed out that the public have not really been asked what they expect from the Universities. If the public is asked to pay, it should be asked what it expects in return. Universities should perhaps take a more pro-active role in proclaiming and explaining what they have to offer to the public who are the principal paymasters.

Could another philanthropist arise like Carnegie? The Principal of St. Andrews University, Dr. Louise Richardson, gave an interesting talk on Philanthropy at a Holyrood Meeting on HE in Scotland in 2010. She dispelled some myths about philanthropic giving in the UK and the USA, She drew attention to notable philanthropists in the UK who have supported Universities and went on to urge Scottish Universities to explore philanthropy more professionally. She also advised Universities to investigate the potential of "matching fund" schemes to incentivise donors. If a University can accumulate a development fund this can enable it to entice prospective donors with a "double your money" offer.

Can Universities make sufficient internal cuts to expenditure through improved efficiency and effectiveness or restructuring? Few would deny that there is scope in this area, but how far can they go without diminishing the quality, hence their position in international league tables used by prospective students or potential philanthropists.

There have been suggestions from Government sources in England that degrees might be cheaper if delivered by Further Education Colleges. In Scotland 20% of Higher Education is already delivered by FE Colleges funded through the Scottish Funding Council. Could this be increased? The new University of the Highlands and Islands is an interesting amalgam of a University and a series of FE Colleges and Research Institutes. Will the future see more of this?

The UHI also makes more use than most of the Internet for distance learning and teaching and for collaborative research. Students are very familiar with iPhones and the social media on the Internet and these are open to development in a more focussed way in university learning and teaching. Some American Universities find it worthwhile to issues iPhones to all new students and to design courses around the enabling technology.

Could University degree courses be shortened as has been done by teaching a relatively few selected subjects at the private Buckingham University? In Scotland direct entrance into the second year of a degree course in some Universities is possible in certain subjects for holders of a specific qualification such as a baccalaureate.

Should Universities in whole or in part, seek privatisation to loosen dependence on the state?

Is the long vacation used by all academics for productive research or could more undergraduate courses be taught then? Might the academic year consist of nine paid months which then releases academics to earn a further three months pay by research, teaching or other activity? This sort of practice, common in the USA, would need considerable reorganisation in university faculties, students" lives and other funding bodies such as the UK Research Councils, research charities and other Government research funders.

Would undergraduates want shorter degrees with shorter vacations or is the long vacation part of a University education for 18-21 year olds? I needed my Summer and Easter vacations at school and at university to earn money for the family.

Could "back office" services be curtailed in favour of "front of house" activities on teaching and research which bring in funds directly?

Universities have been notoriously profligate in spurning the commercialisation opportunities from the new knowledge arising from their research, and though in the last decade there have been improvements and the Royal Society of Edinburgh has helped, we still await the creation of a Scottish MIT.

These are not original questions. They have been hotly debated for years but there have been too few productive responses. Perhaps austerity will stimulate creative action. An incisive review of the Scottish universities with subsequent decisive action is urgently needed.

I have seen vast changes in the Universities since 1954 and while I am not a seer, I am confident that Scottish Universities have the resilience to survive, prosper and continue to act as powerhouses in society – but probably in a form we might not recognise today.

Universities and Government

Stewart Sutherland

The facts are these:

Immediately after the Second World War less than three per cent of the relevant age cohort went to University. Now the stated aspiration of politicians north and south of the border is that fifty per cent of the age cohort should go to University. (This figure was actually achieved in Scotland in 2003, although there have been variations thereafter).

In the same period of time, the number of Universities in Scotland has risen from four to fifteen.

The affordability and sustainability of this in future, on current terms, is in question.

There have been attempts from time to time to think about the financial and other consequences of such expansion (the Dearing Report of 1997, whose recommendations were brutally and virtually immediately rejected by the first Blair Government), and even about why there should be such an expansion (the Robbins Report of 1967 which led to the creation of the then so-called "New"Universities).

In fact the most recent determining fact of the shape of and direction of the current system was the creation of a large number of new universities in 1992 by the granting of University status to former Technology Colleges.

One common assumption in these changes was that, on the whole, Universities were a good thing and that more of them would be beneficial. Beneficial for whom, has been a question that has sharpened as the related questions of affordability and funding have thrust themselves increasingly to the forefront.

In 2005, the Westminster Government introduced student fees, initially at the rate of £3,000 per annum. In 2001 the Browne Report on the future of funding took the view that the current system in England was unaffordable and that the costs should be shared further between the taxpayer and the student. Fees of up to £9,000 per annum are in the process of being introduced in England – albeit that the age participation rate in England is still significantly below that of Scotland, and that the standard degree length in England is three years as opposed to the four year honours system in Scotland.

The previous Westminster Government and the Browne Report both concluded that the then current university system in England was unaffordable and therefore unsustainable. The suggestion that the situation is different in Scotland was pre-election whistling in the dark.

This means that the Scottish Universities believe that the extra funding which will be available to English Universities will give the latter significant advantages over their Scottish counterparts. This will show in the reduction of the competitiveness of Scottish Universities in UK and international contexts.

They will become less attractive to the highest calibre of staff and students as facilities, including all forms of research support, and salaries cease to be comparable. Granted that Scotland punches above its weight in university research income, this would be a grave loss to the Scottish economy as well as to higher education.

The most recent relevant fact is the return to Holyrood of a Government in which the four letter , f" word – , fees" – is forbidden.

What's to be done?

The proposals which I outline below for Scottish Universities differ significantly from those which the English context demands. In the latter case, a move to privatise (i.e. make independent of Government control) Faculties unfunded by the Government – Arts, Law and Social Sciences – has much to commend it, but that argument belongs elsewhere.

In Scotland I suggest that what is needed is a radical re-appraisal of the relationship between Government and Universities.

The system of Government grants to Universities was abandoned with the demise of the United Kingdom University Grants Committee. In due course this body was replaced by separate Higher Education Funding Councils for Scotland, England and Wales. The change was more than semantic and geographical. Increasing insistence on conditions of funding reinforced by increasing regulation, had two consequences. In the first place it reduced university autonomy and in the second it gave incentives to universities to "play the funding game". This involves competing for the same pots of money and therefore either deliberately or inadvertently responding to the perverse incentives which the various funding streams created.

The consequence of this was most universities aspiring to be, if not the same, at least very similar. This was wholly understandable and predictable because of the financial imperative to respond to funding formulae, but the consequences are enervating. The Government and Funding Council counter was to attempt to manipulate internal University planning by ever more complicated tweaks to the funding formula.

Up to a point this has made some difference to individual university profiles. However, it has constrained the development of the Higher Education systems in both Scotland and England by reducing incentive and opportunity to think creatively about national and individual needs. The universities have been almost constantly on the back foot. Responding to Governments rather than influencing or challenging them. A change is required!

My proposal is that the relationship between Government and the Universities should move to a contractual basis. Some form of agency would be required to act for the Government, but it would no longer be a Funding or Grant-making body.

It would require the Government to do what successive Governments have lamentably failed to do: Governments should set out what they and the taxpayers might reasonably expect of Universities.

This would at one time have seemed to be an heretical suggestion within the academic world, but in view of the very large investment which the Government makes on behalf of the taxpayer, it is not unreasonable to expect the Government to reflect on what it gets and what it expects as a result of this. Had this been done at the point of creation of the "new" Universities in 1992, the current sector which "just growed" would look rather different now.

I am advocating a much clearer set of expectation between Government and individual universities.

This would be the basis of a set of negotiated contracts between individual Universities and the Government, on the basis of which the University of Lower Largo would be funded to recruit students into different Faculties, according to agreed contractual terms. To ensure sensible planning horizons most contracts should be on a ten year rolling basis. This is not wholly new territory for there are similarities here to some current practices in relation to specific professions e.g. medicine, dentistry, nursing and teaching. One difference is that reducing numbers at short notice, as occasionally happens in Teacher Education, would carry contractual penalties.

The Government would make available to all students filling places under this scheme student support and loan facilities. (The ease with which this can be done is shown in current Westminster Government support for UK students at the private University of Buckingham).

On the other hand individual Universities would negotiate with the Government such funds as are available to support teaching in each relevant Faculty. There are two important qualifications to this: the first is that it would be a negotiation, and either side would be free to decline the contract if it is not in their judgement adequately costed and priced. The second is that Universities would be free to add top up charges in the light of particular local circumstances. But they would be bound by contract to recruit to the levels of the contract

One advantage of all this is that the student would know how much financially the Government had made available for their education, and also what additionally an individual university might charge. In those cases where additional charges were made Universities would be increasingly bound to indicate what the added value was.

There could well be different Government rates for different courses in different Universities. For example, a course in Biological Sciences in one university which focussed on high technology and intensive practical training in sophisticated techniques may well be judged to be more expensive than Biological Science courses which did not depend upon such expensive resources.

Again all of this is an indication in summary form of the types of contracts which would have to be designed, and undoubtedly much detail would have to be filled in.

The essential points, however, are these:

1. This would change the relationship between universities and the government into a negotiation between specialist providers and taxpayers/governments with needs to be met. No longer would universities be cast as supine supplicants!

- 2. Students would know far more clearly what the commitment of Government was to their course, and what charges, if any, were additionally levied by a University. They would therefore be able to assess much more accurately the "cost" of the private benefit of education in this or that university.
- 3. All of this would help a University or a student seek additional sponsorship for a particular course.
- 4. Universities would not be subject to veiled government threats, whether from Westminster or Holyrood. Relationships would be out in the open and subject to binding contracts.
- 5. Universities would equally be free of the tendency of Funding Councils to use regulation and specific funding pots as attempts to steer internal policy the over-used and under-defined term "autonomous institution" would have a much clearer meaning.

A number of additional points to my proposal should be noted.

In the event of Universities making additional charges for particular courses, Government negotiators could require as a condition of contract that universities allocate a proportion of any additional income from students whom the Government funds, to be set aside for scholarships on a means-tested basis. The University would be free either to accept such a condition, or to refuse the contract.

Universities would be free and indeed encouraged to negotiate with banks arrangements for students who might need loans for subsistence and other costs. The benefits to a bank of access to such a population group are obvious enough to make this a potentially worthwhile scenario for it.

Most importantly, universities would not be constrained in the recruitment of any other students for these and other courses, and in setting fees for such students. This applies to overseas non-EU students, EU students and home students. Indeed careful drafting of the statutory basis of any such arrangements between Universities and Government, may allow proper charging to be applied to EU students in Scotland. (In my estimate, the taxpayer currently subsidises EU students by around £85m per annum).

A university would be genuinely autonomous in a real sense, backing its own judgements, and able to balance its portfolio of courses to fit its academic judgement and priorities, and its attractiveness in these areas to future students.

Under this system, universities would learn to play to their strengths. (Indeed in some cases, for the first time to learn what their real strengths are.)

Government would be able to assess what the public benefit is and universities would be in a position to quantify and demonstrate their respective commitments to the belief that education scontribution to the well-being of society includes excellence, for example, in Arts and Humanities subjects.

Students would be able to make finer and differentiated judgements about the cost of private benefit.

Government would, in the immediate future avoid a damaging public row with universities about whether to use or find a synonym for the four letter ,f^{**} word.

Finally taxpayer and university system would, simultaneously, have the benefit of a long overdue discussion of what the taxpayer may reasonably expect of the university system. Our biggest failing as a society, in this area, is that the momentum of growth in Higher Education has taken place in the absence of answers to the question: Why such growth?

IV The View from Outside Scotland

Frances Cairncross Alan Langlands Teresa Rees

Time for a Scottish Solution?

Frances Cairneross

"Well, he"s certainly got our vote," said one of my neighbours in Galloway a few weeks before the election. We were discussing Alex Salmond"s dramatic pledge that "The rocks will melt in the sun" before an SNP government would introduce tuition fees. My friend has three teenage children and a modest income.

I tried to point out that, south of the border, he would not have to pay a penny for their university education either. Their fees, be they £9,000 or less, would be covered entirely by a government loan, which they would have to repay only once they were working in well-paying jobs. But the myth is entrenched: in England, most voters more or less agree, parents will have to take out a second mortgage to put their youngsters through college.

Behind this mythology is an extraordinary truth. Scotland and England have both made unattainable promises about the funding of university education. In Scotland's case, the pledge will founder on the plight of the country's universities. In England's case, the cost to the taxpayer of the generous loan system will torpedo the scheme. However, the Scots pledge has won voters" overwhelming support; the English reform has helped to cause the near-collapse of one of the Coalition partners in the polls.

Scotland's universities bear the main brunt of the tuition fees pledge. They are already painfully short of cash, and now face a one-year cut of 7% in the teaching grant. Even if that proves temporary, the incoming government is not likely to match the income that English universities will receive from the introduction of higher fees. Even with the savage cuts planned to the HEFCE teaching grant, English universities will eventually have more money than Scots ones. That will buy them competitive advantage: better teaching, better facilities, and smaller classes. The Scots universities may raise revenue from other sources: more students from England and from overseas, more philanthropy, more deals with business. But English universities will be just as entrepreneurial, and the gap won't narrow. Ultimately, students and government grants are the only two substantial sources of university income.

But the English pledge is also built on sand. Even back in October last year, the Higher Education Policy Institute demonstrated persuasively the optimism that underlay calculations of the viability of the loan scheme¹. The Institute argued that the proposed scheme greatly underestimated the likelihood of defaults. Moreover, it assumed that only in exceptional cases would universities charge more than £6,000. Instead, almost all have gone straight for £9,000. So the government has earned huge opprobrium and inflicted electoral misery on the Liberal Democrats, but failed to create a sustainable scheme.

England and Scotland are not alone in wrestling with the difficulty of financing universities in a fair and affordable way, without imposing large burdens on taxpayers. The issue has become ever more politically sensitive, as parents increasingly see that university is not optional, because a degree is the necessary passport to enter the middle class.

¹ The government's proposals for higher education funding and student finance – an analysis. ByJohn Thompson and Bahram Bekhradnia Higher Education Policy Institute 11 November 2010

The core of the problem of financing university places is that the gains from a university education accrue mainly to the student, rather than to society at large, and mainly in the distant future. Logically, students should carry much of the cost of taking a degree. In an ideal world, students would borrow the cost of their education and repay it from future income. But the mechanisms for such a transaction are difficult to create in the private market. For families, there is resistance to incurring large amounts of debt for something as nebulous as a university education. For lenders, there is the concern that young people are geographically mobile, and a loan for education does not have the same tangible security as a loan for a house.

In America, universities charge widely varying prices, and many students borrow the money to cover their fees. But the system has two important characteristics. The most expensive universities have lavish funds for financial aid – and have detailed financial information about the student standard family, that allows its accurate disbursement. And the repayment of student loans is not optional. America home-owners may walk away from their mortgage without wrecking their credit rating – as they would in Britain if they defaulted on a mortgage; but to default on payments on a student loan is death to future borrowing. Not so under the English loan scheme, at least as it presently seems designed.

Indeed, England"s system of fees and loans is really something quite different: a constrained version of a graduate tax. Repayments are linked to the level of current earnings, just as a tax would be. If only the Coalition had had the good sense to call it graduate tax, the politics of the past months would have been quite different. But this large error of judgment offers a possible approach for the new SNP government that would allow it to rescue Scotland"s universities without breaking its word.

The policy would be to keep in place the teaching grant that the Coalition plans so ruthlessly to chop. It might have to be reduced – but not in the savage way that is to be forced upon HEFCE. Then introduce a version of the English system – but take care to talk of a capped graduate tax instead of deferred fees. Top up the teaching grant with a voucher – which might vary in value from one university and perhaps from one course to another - for students to hand over as they matriculated, from 2012 onwards. Then, when Scotland's powers to tax are broadened in 2015, introduce a graduate tax to recoup the cost of the voucher once the student earns enough. The deferred tax bill will – if the joint Government and Scottish Universities expert working group has done its sums properly – be around £12,000 for a four-year degree.

Just as in England, no family in Scotland would pay a penny for tuition while their student was studying. And just as in England, the cost of tuition would be recouped from students once they had graduated and were earning more than a set threshold. Just as in England, there would be problems with students who left the country or left the workforce.

Of course, it would make more sense to charge real fees, at least for part of the cost of University education. That is true on both sides of the border. It is ludicrous that the cost to a student of going to one of the country to universities — Edinburgh, Bristol, Oxford — should be the same as the cost of going to one of the post-1992 universities. The students at the former come from families which are, on average, much wealthier than the students at the newer universities — and their employment prospects and lifetime earnings will also be much better. Broadly speaking, the higher the cost of providing the education, the higher the eventual returns in the job market.

What if the new government tries to continue the policy of the past few years? The danger then is of serious political fallout. The gap between what English and Scots students appear to pay is about to widen dramatically. How will an English parent react if her child is charged – say - £6,800 to study at St Andrew's, while the German youngster on his left and the Scot on his right pays nothing at all? English taxpayers already tend to think that the Scots get a better deal on many things than the English do.

But there is now the opportunity for a Scottish solution that will have the advantages of the English scheme without the huge opprobrium. It won't be any cheaper than the English version, or any more sustainable. But it will get everyone out of a hole, and without creating riots in the street. It might even please my Galloway neighbour. It's just a question of getting the labels right.

Oiling the wheels

Alan Langlands

Money.....is none of the wheels of trade: it is the oil which renders the motion of the wheels more smooth and easy.

David Hume (1711 – 76)

Essays: Moral and Political (1741 – 42) "Of Money"

The funding of undergraduate education is a political hot potato north and south of the border. The Governments in Holyrood and Westminster are wrestling with the conundrum of finding a sustainable way of financing undergraduate education, maintaining the quality of higher learning and ensuring that our universities and colleges remain accessible to anyone who has the talent to succeed whilst balancing questions of affordability to the state and benefits to individuals.

In England, the intention is to shift more of the financial commitment to graduates through increased tuition fees, whilst in Scotland, the Scottish Nationalist Party"s election manifesto could not have been clearer in its assertion that "we have ruled out tuition fees and are committed to keeping higher education free". The SNP has also stated its intention "to maintain student numbers in the year ahead and...throughout the next Parliament". Neither position is entirely comfortable. The first has its share of political, financial and technical difficulties, although these are being tackled in a systematic way. The second is dependent on disputed arithmetic and the post-election reality of a shaky economy and public spending cuts.

Before looking in more detail at the new funding settlement in England and leaving the reader to speculate on the implications for Scotland, it is also important to set the current preoccupation with funding for undergraduate education in its wider context. The danger is that talk of fee waivers, funding gaps and future teaching funding policy will divert attention from the bigger picture – the global context in which we are operating, the principles that underpin the work of universities, and the need to keep building for the future. To be successful, universities must continue to focus on these longer-term issues, responding actively to social, economic, technological and cultural developments and opportunities. In all of this, the pursuit of knowledge for its own ends has to be a given. The contribution that knowledge makes to society as a whole and to the intellectual development of individuals must stand proud above the inevitable discussion about return on investment.

That said, it is difficult to avoid the economic realities. In 2009 the world faced a deep recession followed by a lacklustre recovery in 2010. In 2011, we are discovering how the economy reacts when much of the artificial support is removed. In both the US and Europe, the private sector is having to take the strain and faces the uphill task of inducing a consumer-led recovery, providing employment opportunities on a significant scale and stimulating real growth in the economy. In the meantime, the developing economies continue to outpace the traditionally rich economies of the West. Demand in China and India continues to lift the Asian nations and the commodity producers in Brazil, Russia, Australia and parts of sub-Saharan Africa are also benefitting.

¹ "Re-elect: A Scottish Government working for Scotland", Scottish National Party Manifesto 2011, http://votesnp.com/campaigns/SNP_Manifesto_2011_lowRes.pdf

As a combination of budget cuts and tax increases take hold in the UK, our universities and colleges must work to support growth in the private sector by continuing to develop highly-skilled graduates and upping our game on research and knowledge exchange. We should also accelerate our efforts to build enduring education and research partnerships in the faster growing economies. Both play to our track record of successful partnerships with industry and our reputation for excellence and diversity in higher education overseas. And both mean that we must not neglect or undermine the postgraduate economy, the overseas market or the efforts being made to protect research and enterprise funding in our universities.

The table below provides a partial picture but makes a point about the scale of the competitive challenge and the opportunities for collaboration with universities and education and research funders in other countries. It also reinforces my own view that the government in Westminster must return to the question of public investment in higher education as the economy improves, especially if it can be shown (as it will be) that universities and colleges are actively contributing to the process of recovery and growth. Higher learning, science and research are vital components of an advanced knowledge economy: they must remain an important and legitimate area of public investment. This point is clearly understood in Scotland. The crunch question is whether or not the Government in Holyrood can create the flexibility it needs to meet its promise that higher education "should be free".

Geographic Area	Investment in Education
Australia	New measures proposed to increase market share of international PGR students. In 2009, the Government announced a \$5.4bn funding package for HE.
Brazil	10,000 PhDs and 30,000 Masters students will graduate in 2009 – 10 fold increase in 20 years.
Canada	£6bn increase in investment on research and development.
China	Soon to have the largest annual output of graduates in the world and the majority of PhDs in science and technology.
France	HE reforms will increase operating budgets by 50% over 5 years. 11 billion euro investment in universities.
India	In 2007, the Government made £7bn investment over 5 years for HE. Plan to create 40 new institutes of Technology and Management. By 2015, India will be producing 1.4m graduate engineers a year.
Middle East	The new KAUST in Saudi Arabia is the richest university in the world outside the US. £millions are being invested to develop HE in Quatar, Abu Dhabi and Dubai.
United States	Stimulus packages include an additional \$20bn for scientific research.

Source: "Funding Higher Education: Part 1 – Staying on top: The challenge of sustaining world-class higher education in the UK", Russell Group papers – issue 2, 2010 [adapted] http://www.russellgroup.ac.uk/uploads/Staying-on-Top-The-challenge-of-sustaining-world-class-higher-education-in-the-UK.pdf

Despite these economic realities, international cooperation must not be defined solely in terms of financial opportunity or commercial diplomacy. There are rather more important issues at stake which play to the altruism and expertise in our universities:

- the last ten years have been the warmest on record and industrial carbon-dioxide emissions continue to climb
- nearly 800,000² people in the world continue to die of malaria every year, 50.8 million³ people in India are suffering from type 2 diabetes and new viral outbreaks mean that important work is needed to predict and prevent pandemics
- questions of security (linked, for example, to recent political upheavals in Africa and the Middle East) and questions of energy, food and water security are being tackled against the background of a growing global population which has increased by one billion, to around seven billion, in just over a decade
- the rise and rise of technology has the potential to redefine the way we think about the primary product of higher education – knowledge itself; it will also transform the way we learn and the way in which we assimilate and analyse data to support the physical, biological and engineering sciences
- the complexities of understanding the social and economic impact of these global issues, the human and ethical implications of scientific and medical advance and the importance of open and informed debate occupy the long-established centres of arts, humanities and social sciences in the West.

Universities and colleges in the UK must continue to be international gathering points for these discussions. This also plays to the importance of sustaining excellence and diversity in higher education and to Scotland's strengths and ambitions in biomedical research, information technology and environmental sciences, including the development of clean energy technologies.

I will not recite all of my favourite statistics about higher education but with public investment in England (1.3%) and Scotland (c 1%) both remaining stubbornly below the OECD average (1.5%)⁴, our universities and colleges deliver a great deal:

high quality education for nearly 2.5 million students enrolled in 2009-10: over 1.9 million undergraduate students and nearly 600,000 postgraduate students with about 850,000 students studying part-time; and an ever-growing demand from overseas with over 400,000 students, an increase of 10% from the previous year⁵

 ${\it http://www.who.int/malaria/world_malaria_report_2010/en/index.html}$

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² World Malaria Report 2010: (The number of deaths due to malaria is estimated to have decreased from 985 000 in 2000 to 781 000 in 2009).

http://www.idf.org/latest-diabetes-figures-paint-grim-global-picture 19 October 2009 (India is the country with the most people with diabetes, with a current figure of 50.8 million).

⁴ OECD (2010) ,Education at a Glance 2010", Indicator B2

⁵ Higher Education Statistics Agency

- with 1% of the world"s population, the UK achieves 12% of the world"s science and research citations⁶; and
- UK higher education generates nearly £59bn⁷ per annum for the economy; total knowledge exchange income (between UK higher education institutions, business and others) increased by 35% from £2.28 billion in 2003-04 to £3.09 billion in 2010-11⁸; and every £1 invested from HEFCE's higher education and innovation fund generated at least a five-fold return⁹.

Universities Scotland's response (February 2011) to the Scottish Government's Green Paper *Building a Smarter Future* provides granular data which shows the central economic importance of Scotland's universities.

University autonomy is the bedrock of this success and the combination of self-regulation and market forces has been a key driver for change and improvement in recent years. The Westminster Government's emergent policies – particularly the emphasis on opportunity, choice and quality – have the potential to build on the progress already being made. At a time when new money, the traditional instrument of government intervention, is in short supply, Ministers north and south of the border must find the right balance between enhancing the freedom of institutions to act (to achieve fairness, responsiveness and efficiency) and top-down interventions which are highly unlikely to lead to better results. The current direction of public policy clearly favours institutional autonomy and Ministers must continue to resist the temptation of instrumentalism.

It is also worth noting that despite the impact of public spending cuts on higher education in England, overall sector income actually increased by 5.7% in 2009/10, with increases in overseas fee income of 17.5% and overseas research income of 13.9%, and an increase in home and EU postgraduate fees of 11.2%. This reinforces the point that universities are successfully diversifying to compensate for pressures on undergraduate funding, albeit against growing international competition.

Since devolution, there has been a growing divergence in higher education policy and practice in relation to undergraduate fees and financial support in Scotland, England, Wales and Northern Ireland.

Whilst the final policy position from 2012 onwards has still to be resolved for Scotland and Northern Ireland, it is clear that the differences will be accentuated further, giving rise to technical complexities affecting the flow of Scottish students into other parts of the UK and the flow of students from England and Northern Ireland into Scotland. These issues are being discussed by Universities UK, and further work will be required by the higher education funding councils in Scotland, England and Wales and the Department for Employment and Learning in Northern Ireland to make sense of this position.

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⁶ "International Comparative Performance of the UK Research Base", Report published by Evidence Ltd for the Department for Innovation, Universities and Skills, July 2008

⁷ The economic impact of UK higher education institutions", available at www.universitiesuk.ac.uk/Publications/Documents/economicimpact3.pdf

⁸ Higher Education-Business and Community Interaction Survey

⁹ PACEC and the Centre for Business Research, University of Cambridge (2009) ,Evaluation of the effectiveness and role of HEFCE/OSI third stream funding"

The outcome of the Scottish election and the clarity of the SNP Government"s position suggest that there is no point in holding a sterile policy debate about tuition fees, a graduate tax or other approaches to student co-funding in Scotland. The focus now is on finding a distinctive Scottish solution which is both deliverable and sustainable given the short and medium term constraints on public spending and other spending pressures, particularly in schools and the NHS. Much of the pre-election discussion focused on two issues: "the size and nature of any gap between north and south of the border" and "funding solutionsto close that gap". The first requires a meeting of minds on the size of the gap, the second a sense of realism about the treatment of students from the EU and other parts of the UK studying in Scotland and the financial benefits that might accrue from greater efficiency and increases in income from commercial activity and philanthropy. The reform of higher education funding in England promotes the principles of opportunity, choice and quality. The new arrangements will offer a more generous package of financial support for students from lower socio-economic backgrounds:

- students will be able to get loans to cover the increased costs of tuition fees (English universities are now able to charge up to £9,000 per year for their courses, subject to approval of an access agreement for those intending to charge above £6,000). They will only start to pay back the loans when they are earning over £21,000 per year, with interest applied on a gradual scale between RPI and RPI plus 3%.
- part-time students studying at least 25% of the intensity of a full-time course will also have access to a loan to cover the cost of their tuition
- a National Scholarship Programme (£50m in year 1, building to £150m)will be introduced from 2012 to help students from lower-income households
- students will continue to have access to loans and non-repayable grants to help with living costs¹¹.

Universities in Scotland might look enviously on this approach as a means of maintaining university income at a time of restraint in public funding, but it has still to be tested and it does place significant new financial commitments on graduates. It also raises important new policy challenges, for example:

- controlling student numbers and budgets whilst facilitating greater dynamism and supply-side reform
- ensuring fair access and maintaining progress on widening participation
- defining the scope of regulation to promote the interests of students and the wider public whilst respecting the autonomy of institutions, and

¹⁰ Building a Smarter Future: Towards a Sustainable Scottish Solution for the Future of Higher Education, Scottish Government, December 2010

BIS website on reforms to student finance, available at http://www.bis.gov.uk/policies/highereducation/students/student-finance

• mitigating against unintended consequences – for example, ensuring that the new system of graduate contributions does not undermine the postgraduate economy.

These issues are the stuff of the forthcoming White Paper on higher education. The resulting legislative, system and organisational changes will test the resilience of higher education institutions over the next three to four years of transition and probably beyond. But they are well-placed for this challenge.

The Scottish Government - Universities Scotland technical group on higher education, which was established to consider the north-south funding gap, estimated an annual funding gap of £202m by 2014-15, based on an average fee of £7,500 in England, and this is probably a good marker figure for planning purposes¹². The actual average fee level for 2012-13 will not be known until mid-July 2011 and will have to take account of fee waivers, bursaries, the access agreements between institutions and the Office for Fair Access and the financial effects of the new National Scholarship Programme – the devil is in the detail when it comes to higher education reform in England!

Critically, the impact of the new funding arrangements on university income in England will not be known for certain until the overall pattern of demand for student places in 2012-13 is clear and the process of student recruitment unfolds through the first half of 2012. A significant fall in participation levels would have a bearing on university income in 2012-13 and in subsequent years. Of course, it is important to note that research funding and higher education innovation funding is secure and will be maintained and protected at current cash levels until 2014-15. HEFCE is also committed to maintaining a sufficient level of investment for widening participation and retention, high cost subjects that will not be fully funded by fees, vulnerable subjects (for example, in science, technology, engineering, mathematics and modern languages) and small specialist institutions.

It is crystal clear that a substantive gap in university funding north and south of the border is likely to open up over the next few years unless there is a injection of funds for Scottish universities from 2012-13 onwards. However, there are a lot of moving parts in the English funding model and it will be difficult to be precise about the size and nature of the gap in the early stages of the reform process. The funding arrangements being implemented in England are necessarily conditioned by the pressure to reduce the public sector deficit. But as the economy improves, it will be important to sustain a considered discussion of the competitiveness and financial needs of universities as engines of a developed knowledge economy.

Looking over the border is one approach. Another would be to strike out for a distinctive Scottish solution which reflects the proud history of Scottish universities, their reputation for excellence in higher learning and research, the remarkable contribution they can make to a vibrant economy and a just society and their importance as a conduit to the international community. We should do all that we can to settle these issues quickly (north and south of the border), introduce the new funding arrangements without breaking stride and focus on the things that really matter.

Report of the Scottish Government-Universities Scotland Technical Group on Higher Education, http://www.scotland.gov.uk/Resource/Doc/82254/0114163.pdf

This will not be easy. David Hume"s essay "Of Miracles" famously refuted the suggestion that anyone could reasonably believe in miracles, indeed to the extent that the notion of the miraculous has never recovered from his critique – at least, among philosophers. It is perhaps fortunate, then, that we do not need a miracle to ensure the continued success of UK higher education. We do, however, as I have said, need to keep our eyes firmly on the bigger picture, and the bigger prize of academic excellence.

Talking to the neighbours

Teresa Rees

As new and returning politicians take up their seats in the Scottish Parliament and the Assemblies of Wales and Northern Ireland, and given the success of the SNP in Scotland, it is perhaps timely to reflect upon more than a decade of devolution. More specifically, given the unevenness of the size of the nations, and the obligation of the Westminster Government to act on behalf of England as well as the UK, how are the relationships between these elected bodies developing? This is an especially pertinent question to pose given that now, each of the elected bodies has a different party or parties in control. Alas, I would argue there are some cracks beginning to show. The current complexity facing potential students deciding where to study in UK suggests some bridging work may be necessary. Policies that may be perfectly sensible in England for England, or in any of the individual devolved administrations for those nations, accumulate to make little sense in the UK as a whole.

Just to be clear, I am all for devolution. Apart from the democratic imperative, living in Wales, I have witnessed some innovative and sensitive evidence-based decision-making. The commitment to equalities, the Welsh language and sustainability runs through all Assembly policies. There is indeed as the former First Minister, Rhodri Morgan described it "clear red water" between Wales and England— and that was when Labour was in power in both the Welsh Assembly and the UK Government.

However, some mature conversations between our democratically elected bodies would be beneficial. Decisions made by one have an effect on the other. The unevenness of size of course means that in particular, decisions made for England can have a knock-on effect on the rest of us. It is often argued in Wales that since devolution, Whitehall has no interest in Wales, Scotland and N Ireland, and that its policies for England are not "proofed" for their effect on the neighbours – nor even very effectively communicated to them in advance of press releases.

An early example of this was when, faced with a shortage of people signing up for teacher training courses in England, the decision was made to offer a "golden hello" to new recruits. Alerted to this, the then Minister of Education and Lifelong Learning in the Welsh Assembly Government, Jane Davidson, checked to ensure enrolment figures were healthy among teacher training providers in Wales. No problems were reported – the books were full for the next session. However, in response to the offer being made by English providers, some of those who had already accepted a place in Wales then applied to England, creating a crisis in recruitment in the Welsh higher education institutions. Very much on the back foot, the Assembly then had to match the offer made in England, although there was no budget line allocated for this unexpected expenditure. This was an expensive Welsh solution to respond to an unanticipated crisis caused by an English solution to an English problem.

Of all the devolved administrations, the Welsh Assembly is the most vulnerable to the implications of decisions made on higher education for England because there are more cross border flows of students, in both directions, than across other borders of the UK. Welsh institutions attract significant numbers of students from England, especially those near the border but also others, such as Aberystwyth. Indeed, their very existence largely depends on the 24,000 English-domicile students studying in Wales.

There are about 16,000 Welsh domicile students in English Universities but the smaller numbers mean that they make far less of an impact on the English system. This free choice is wholly appropriate. Students should only be influenced by which institution and which course can best satisfy the specifics of their appetite for learning and curiosity. Students should not be impeded by borders within the UK. In N Ireland and in Wales, there is only one Russell Group to accommodate those wanting to attend a research-intensive university. Some courses are not available in some countries, for example veterinary science in Wales.

Student choices are increasingly being shaped and indeed restricted by the outcomes of devolved policies on student fees and support regimes. We have already seen a rise in students living at home while studying which arguably detracts from the student learning experience and "maturing" of young people living away from home for the first time. But we are also seeing increasingly complex options for students choosing their institutions and courses. We now have a Byzantine set of carrots and sticks that make no sense at all from the potential student"s perspective, even if they make some kind of policy sense at an individual nation level.

I have chaired two inquiries for the Welsh Assembly Government"s Minister for Education in the past, the first when responsibility for higher education was first devolved to Wales (Rees et al 2001) and one when Wales needed to respond to the increase in fees in England (Rees et al 2005). In both cases, we decided it was fair for the cost of a student"s education should be shared between the beneficiaries – the graduate and society. In order that higher education should be free at the point of entry, we recommended in 2001 the return of maintenance grants (which were introduced as Assembly Learning Grants) on top of loans. In 2005, in response to fee increases, we recommended a national student bursary system, rather than the English system of universities competing on offers that included a muddle of laptops, hall fee remission and bicycles. The National Bursary system was introduced in Wales. We concluded that "top up fees" sent out the wrong message; the amounts being proposed in England would not in any case cover the costs of tuition so the word fees was misleading. It would also change the psychological contract between student and university. Rather, we preferred the idea that fees would be paid when graduates reached a graduate income, rather than when a student first enrolled, and that they should be seen as making a contribution to the costs of educating those that followed them, rather than becoming a customer paying fees. Hence our rather natty recommendation that rather than pay top up fees, there should be sendloaded, income-contingent graduate endowment contributions".

The Assembly had the powers to reintroduce maintenance grants, and did so, a move later followed in England. It did not have the powers to introduce end-loaded income-contingent graduate endowment contributions, alas, but had to wait for England to shift from charging students fees to allowing graduates to pay through subsided loans.

The current Minister for Education and the Skills in the Welsh Assembly Government, Leighton Andrews, is keen to improve the skill base in Wales, the standards in Welsh HEIs and to retain graduates in Wales. The Assembly already pays the "top up" fees to Welsh domicile students if they study in Wales. He proposes to pay the anticipated rises in fees in all UK universities for Welsh domicile students, wherever they study. At one level, this opens up more choice Welsh students. But perversely, it means it makes more sense for poorer students to study in England, where they may also pick up a bursary from an English University.

The progressive "end loaded" element of fees is lost in all the debate: courses are priced on what fees they charge, whereas maintenance costs are arguably more critical for students" decision-making on which university would suit them best.

In essence, what we now have is four systems of student support and fee charging in the UK, but with some confusing commonalities in some cases. English students of course pay more to study in Scotland than European Union students. Poorer students from Wales are likely to be more subsidised studying in England than those travelling in the opposite direction. Does all this make sense either within the nations or at the UK level?

It is also the case that some aspects of critical importance to higher education have of course not been devolved. Ministers in the House of Commons make decisions about immigration visas that affect universities in their ability to recruit international students throughout the UK. They lobby the European Commission and other international bodies on research funding priorities on behalf of the UK. They organise meetings linking universities and businesses in the UK with those in Latin America for example. However, there is no UK strategy for funding, maintaining and replacing very expensive research equipment and infrastructure, ensuring access for all researchers, wherever they are based. Many universities are dependent on a haphazard pattern of regional investment, creating a lottery of access for researchers.

So, is it time to think about a new, mature phase of devolution, that means that in addition to England and the devolved nations developing their own policies on fees, student support and international matters, for each country, some attention is paid to an overall UK strategy to benefit all? In the context of increasingly competitive global market for students, staff and research money, are we in danger of disadvantaging all four nations, because of the lack of a grown up joint conversation? Neighbouring local authorities ensure that roads meet at their borders. Is there not a case for ensuring nations" policies within the UK also benefit from a framework that makes sense at a UK level?

References:

Rees, T., Humphreys, R., Jenkins, D., Pearle, T., Reynolds, S., Richards, K., Singh, R., Whiting, M., and Woodhall, M. (2001) *Investing in Learners: Coherence, clarity and equity for student support in Wales*, A report to the Minister for Education and Lifelong Learning at the National Assembly for Wales, Cardiff: Independent Investigation Group on Student Hardship and Funding in Wales

Rees, T., Bell, D., Bruce, T., Davies, D., Humphreys, R., Jenson, G, McGinley, D., Reynolds, S., Richards, K., Singh, R., Smith, E., Williams, F., Woodall, M., and Wynne-Jones, E. (2005) Fair and Flexible Funding: A Welsh Model to Promote Quality and Access in Higher Education Final Report of An Independent Study into the Devolution of the Student Support System and Tuition Fee Regime in Wales (The Rees Review) Main Report, Cardiff: Welsh Assembly Government

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