A CRITICAL PATH
Securing the Future of Higher Education in England

IPPR Commission on the Future of Higher Education
2013
IPPR RESEARCH STAFF

Nick Pearce is director of IPPR.
Rick Muir is associate director for public service reform at IPPR.
Jonathan Clifton is a senior research fellow at IPPR.
Annika Olsen is a researcher at IPPR.

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ABOUT IPPR

IPPR, the Institute for Public Policy Research, is the UK’s leading progressive thinktank. We are an independent charitable organisation with more than 40 staff members, paid interns and visiting fellows. Our main office is in London, with IPPR North, IPPR’s dedicated thinktank for the North of England, operating out of offices in Newcastle and Manchester.

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IPPR
4th Floor
14 Buckingham Street
London WC2N 6DF
T: +44 (0)20 7470 6100
E: info@ippr.org
www.ippr.org
Registered charity no. 800065

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COMMISSIONERS ON THE
FUTURE OF HIGHER EDUCATION

Professor Nigel Thrift, vice-chancellor and president, University of Warwick (chair)
Professor Nigel Thrift joined Warwick from the University of Oxford, where he was made head of the division of life and environmental sciences in 2003 before becoming pro-vice-chancellor for research in 2005. Since becoming vice-chancellor in 2006, Professor Thrift has launched an ambitious new strategy for Warwick’s future and has led the university in implementing an extensive capital plan, achieving a large increase in research income and establishing high-profile partnerships and research collaborations with leading universities in the US, Australia, India, Asia and Europe. Professor Thrift continues to maintain an active research career alongside his role as vice-chancellor. He was made a fellow of the British Academy in 2003. He is a member of the governing board of the European Institute for Innovation and Technology and a Marshall Aid Commemoration Commissioner. He writes a regular blog for the Chronicle of Higher Education’s Worldwise series.

Thom Arnold, former president, Sheffield Students’ Union (2011/12)
Thom Arnold was elected to represent Sheffield’s 25,000-strong student body, taking office in June 2011. While president, he chaired the trustee board, student executive committee and staffing committee, and sat on the university council and senate.

Professor Janet Beer, vice-chancellor, Oxford Brookes University
Professor Beer took up her role at Oxford Brookes University in 2007. Previously, her career has included periods in local government as well as university teaching and administration. Professor Beer is the current chair of the Higher Education Public Information Steering Group, which has oversight of the National Student Survey. In 2011 she became co-chair of the Equality Challenge Unit. She sits on the advisory board of the Higher Education Policy Institute, is vice-president of UUK England and Northern Ireland, a board member of UCAS, chair of SPA (Supporting Professionalism in Admissions) and a member of HEFCE’s Financial Sustainability Strategy Group. In 2011 she was elected as a visiting fellow at Nuffield College. Professor Beer has an established record of research in late-19th and early 20th-century American literature and culture and contemporary Canadian women’s writing.

Dame Jackie Fisher, chief executive, Newcastle College Group
Dame Jackie Fisher DBE leads the Newcastle College Group (NCG), which comprises Newcastle, West Lancashire and Newcastle Sixth Form colleges; the Intraining Group, a national organisation meeting the training and employment needs of employers and employees across the UK; and Rathbone, a national charity focused on meeting the education and employment needs of disadvantaged young people. NCG is the largest provider of higher education in a further education college.
Professor Sandra McNally, director of education and skills, LSE
Professor Sandra McNally works at the School of Economics at the University of Surrey. She is also a research associate of the Centre for Economic Performance at the London School of Economics, where she is Director of the Education and Skills Programme. Professor McNally specialises in the economics of education, and her current research interests include economic evaluation of government policies, the effect of careers-related information on educational decisions, the economic returns to education, and the effects of ‘ability tracking’ within school systems.

Professor John Sexton, president, New York University
Professor John Sexton (corresponding commissioner) is also Benjamin Butler Professor of Law at New York University. He is the most recent chair of the American Council on Education, the New York Academy of Sciences, and the Commission on Independent Colleges and Universities of New York. He is a fellow of the American Academy of Arts and Sciences, a member of the Council on Foreign Relations, and a past member of the executive committee of the Association of American Universities. He has served as chair of the board of the Federal Reserve Bank of New York (2003–06) and as chair of the Federal Reserve System’s Council of Chairs (2006).

Professor Sir Steve Smith, vice-chancellor and chief executive, University of Exeter
Professor Sir Steve Smith was president of Universities UK from 2009 to 2011, and remains a member of the UUK board and its International Policy Network. From June 2007 until May 2010, he led for higher education on the prime minister’s National Council of Excellence in Education, which provided advice to the government on strategy and measures to achieve world-class education performance for all children and young people. He is currently chair of the UCAS board and a member of the Times Higher Education editorial board. As a globally leading scholar in the field of international politics, Sir Steve is a fellow of the Royal Society of Arts, an academician of the Academy of Learned Societies in the Social Sciences, and a recipient of several distinguished awards for his research.

Professor Sir Rick Trainor, principal and president, King’s College London
Professor Sir Rick Trainor KBE is also professor of social history at King’s College London. Before joining KCL in 2004, he was vice-principal of the University of Glasgow and subsequently vice-chancellor of the University of Greenwich. As president of Universities UK from 2007 to 2009, he promoted better relations between the organisation and the various mission groups of universities, and he played a major role in promoting British higher education overseas, especially in the US, India and the Middle East. Sir Rick is an academician of the Academy of the Social Sciences and a fellow of the Royal Historical Society, and has written extensively on British elites in the 19th and 20th centuries. He is a patron of the UK/US Fulbright Commission and president of the Economic History Society.

Hugh Morgan Williams, chairman, Broadtek Ltd
Hugh Morgan Williams OBE is a leading businessman in the North East of England. He was previously chairman of Canford Group plc and North East Access to Finance Ltd, and has served as chairman of the CBI National SME Council and as CBI national spokesman on regional and economic issues. Hugh Williams was appointed as a lay member of Durham University Council in 2006 and was a member of the Nuffield Inquiry into the teaching of modern foreign languages in 2000.
# Glossary of Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>ARIC</td>
<td>Applied Research and Innovation Centre (Commission proposal)</td>
</tr>
<tr>
<td>BIS</td>
<td>Department for Business, Innovation and Skills</td>
</tr>
<tr>
<td>CPD</td>
<td>Continuing professional development</td>
</tr>
<tr>
<td>ELQ</td>
<td>Equivalent or lower qualification</td>
</tr>
<tr>
<td>FE</td>
<td>Further education</td>
</tr>
<tr>
<td>FEC</td>
<td>Further education college</td>
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<tr>
<td>HE</td>
<td>Higher education</td>
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<tr>
<td>HEA</td>
<td>Higher Education Academy</td>
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<td>HEFCE</td>
<td>Higher Education Funding Council for England</td>
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<td>HEI</td>
<td>Higher education institution</td>
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<td>HEIF</td>
<td>Higher Education Innovation Fund</td>
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<td>HEIPR</td>
<td>Higher education initial participation rate</td>
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<tr>
<td>HESA</td>
<td>Higher Education Statistics Agency</td>
</tr>
<tr>
<td>MOOC</td>
<td>Massive open online course</td>
</tr>
<tr>
<td>NIC</td>
<td>National insurance contribution/s</td>
</tr>
<tr>
<td>NSP</td>
<td>National Scholarship Programme</td>
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<td>NUS</td>
<td>National Union of Students</td>
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<tr>
<td>NVQ</td>
<td>National vocational qualification</td>
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<tr>
<td>OFFA</td>
<td>Office for Fair Access</td>
</tr>
<tr>
<td>OIA</td>
<td>Office of the Independent Adjudicator</td>
</tr>
<tr>
<td>QAA</td>
<td>Quality Assurance Agency (for higher education)</td>
</tr>
<tr>
<td>QR</td>
<td>Quality-related research</td>
</tr>
<tr>
<td>SIVS</td>
<td>Strategically important and vulnerable subjects</td>
</tr>
<tr>
<td>SME</td>
<td>Small or medium-sized enterprise</td>
</tr>
<tr>
<td>TDAP</td>
<td>Taught degree awarding power/s</td>
</tr>
<tr>
<td>TSB</td>
<td>Technology Strategy Board</td>
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</table>
It is 50 years since the landmark Robbins report on higher education in Britain was published. In that time, higher education has been transformed from an elite system to one in which nearly half of all young people and more than a million mature students participate. Universities and colleges of higher education are now a major civic presence in almost every part of the country and their contribution to the national economy is immense. Research in British universities is world-class, second only to that in the United States.

There is much to be proud of: at the start of the 21st century our universities provide us with a significant national economic advantage as well as a vital public good. But we face growing future challenges, including increased competition for students from universities overseas, the rise of new modes of learning, particularly in the form of low-cost online courses, and a period of unprecedented cuts to public spending, which, unless carefully managed, will impinge on our capacity to invest in the productive potential of our people.

In this report, the Commission on the Future of Higher Education sets out how we can continue to expand and reform higher education, protecting research and learning in our universities and colleges through a further phase of fiscal retrenchment, while ensuring that the sector is equipped to play a leading role in the economic and social renewal of Britain as the country enters the 2020s. We range across the full spectrum of issues affecting higher education, while focusing our key recommendations on how the sector can help to promote a rebalanced, productive and resilient economy, expand access to opportunity and advance social justice, and respond to the major forces that are reshaping the demands placed on it by students, employers and the wider community.

To ground our analysis and recommendations, this Commission believes that our higher education system must continue to be shaped by five principles.

We believe that higher education institutions must:
- be disinterested producers of knowledge
- nurture sceptical and informed citizens
- promote the public good
- expand opportunity for all, and
- further national economic renewal.
Higher education and national economic renewal

Britain is emerging from one of the most damaging economic crises in its history. In this bleak economic landscape, our world-renowned higher education system stands tall as a vital strategic asset. In the economy of the future, Britain will need to compete in new knowledge-intensive industries and more of our people will require higher-level skills.

There are three areas where universities and colleges are crucial to our economic prospects. First, they will continue to play a critical role in equipping our people with the skills to succeed in tomorrow’s labour market and in equipping our nation with the highly skilled and creative workforce it needs. We therefore argue that higher education opportunities should continue to be expanded. However, while resources are constrained in the next parliament, we should sustain the current proportion of 18–21-year-olds entering higher education until 2020, focusing additional places only on locally available, flexible and low-cost courses, aimed in particular at those who seek vocational-oriented learning. We propose the creation of an additional 20,000 student places, restricted to new £5,000 ‘fee only’ degrees, focused on vocational learning, and offered to local students who would be eligible for fee loans but not maintenance support. Universities and further education colleges should be able to bid to offer these places. In addition, the government should consider reforms to the approximately £5 billion that companies receive in training tax relief, with a view to better incentivising employers to invest in courses leading to accredited qualifications and continuing professional development, whether in further or higher education.

We recognise that the UK’s deficit in technical and intermediate skills will mean that the government must prioritise more and better-quality apprenticeships and a structured system of college-based vocational learning, both to meet skills shortages and to provide greater opportunities for those young people not on the ‘A-level-to-university’ track. In order to strengthen the provision of advanced vocational learning, we recommend that more of our large further education colleges providing higher education should be given the ability to award degrees and such colleges should be granted the renewed use of the title ‘polytechnic’.

Second, our universities are a key export industry in their own right, attracting international students from all around the world. However, our relative position in an expanding global market for students has been weakened by tighter visa requirements and the inclusion of international students in the government’s net migration target. We call for international students to be removed from the net migration target and the rules governing post-study work to be revised, to ensure that the UK’s higher education sector can compete on a global stage.
Third, university research is at the heart of innovative economies. However, the UK continues to invest a lower proportion of national wealth in research and development than most of our key competitors and too little of our university research feeds into innovation in the real economy. Attempts to strengthen the relationship between academia and business are spread too thinly and we lack critical mass in strategic industries.

To sustain our world-class reputation for research we should continue to ring-fence and sustain in cash terms the science and research budget over the next spending review period until 2017/18. Because this implies a continued real-terms decline in funding, we argue that once the structural deficit in the public finances has been eradicated we should commit to a 10-year strategy of raising public investment in research each year above inflation. If the science and research budget were to rise by 1 per cent above inflation each year over that period, it would grow from £4.6 billion a year in 2017/18 to £6 billion a year by 2027/28 (or £4.7 billion in today’s prices).

We should in addition reallocate approximately £1 billion a year that is mainly spent inefficiently on R&D tax incentives to instead set up a national network of Applied Research and Innovation Centres focused on boosting applied research in the strategic industries of the future and on revitalising regions with below-average growth. These would be developed on the basis of the existing investment in ‘Catapult centres’.

Expanding opportunity, strengthening social justice
Higher education has the potential to help us to transform our society by expanding opportunities for our people and supporting a prosperous economy in which all can share. At the same time, we know that those from disadvantaged backgrounds struggle to access higher education, despite improvements in widening access in recent years.

We believe that universities have a responsibility to expand opportunity by opening up higher education to those who have traditionally been excluded. We also believe that universities should ensure that those who will become the leaders of the future are educated in institutions that bring together a diversity of talents and perspectives. Universities in Britain should follow the best practice of the US Ivy League in recruiting or ‘crafting’ diverse and representative student intakes. This is to ensure that students are educated not merely for individual advancement but also to be effective and responsible leaders with an understanding of an increasingly diverse society and interconnected world.
To achieve this we propose:

- **The balance of funding for widening participation should be shifted away from fee waivers and bursaries and into outreach programmes, which have a stronger track-record of recruiting applicants from disadvantaged backgrounds.** Where possible, these should be delivered collaboratively by higher education institutions in the same city-region.

- A **student premium should be introduced of £1,000 extra per student from a low-participation area or who has received free school meals, in order to recognise the additional cost of supporting their learning and recruitment.** This would be funded by reallocating existing widening participation resources and the abolition of the national scholarship programme.

- **Institutions that currently have a small core allocation of places should be able to recruit unlimited numbers of students who are eligible for the student premium, in the same way as they are currently free to recruit students with grades ABB+.** This will enable them to make contextual offers to this group.

- More widespread use of contextual admissions data should be promoted, so that lower offers can be made to students from disadvantaged backgrounds. **This will be enabled by exempting 10 per cent of the lowest grades from entry tariff calculations in university league tables, provided universities commit to using them for contextual offers.**

- **Eligibility for part-time loans should be expanded to help tackle the crisis in part-time learning.**

There are major wage and skill gains that accrue from postgraduate study. However, there is currently no subsidised loan system for postgraduates, meaning that they are generally faced with steep upfront costs and the need to take out commercial loans. This is excluding many people from the opportunity to study for a postgraduate degree. **We propose the creation of a new postgraduate loans system to enable fair and wider access to taught postgraduate courses.** We calculate that this could be introduced without any significant long-term cost to the public purse and without adding to the deficit, although the number of students drawing loans may need to be regulated.

**Shaping higher learning around the student**

As lives and society change, so too must the forms of teaching and learning provided by our higher education institutions. Students of the future will choose between universities internationally and demand more flexible forms of learning that enable them to retrain while in work or raising a family. They are also likely to have greater expectations of higher education institutions, given that they are themselves meeting much of the cost of their course. The challenge for our higher education
system is to ensure that it is responsive enough to adapt to these more diverse needs and changing expectations.

The government has sought to ‘put students at the heart of the system’ by increasing market pressures on universities; it has argued that greater competition will put students in the driver’s seat, improve teaching, drive down costs and encourage innovations in educational delivery. We agree that empowering students by providing them with more information should help to make universities and colleges more responsive and that competition between institutions can encourage higher education institutions to raise their game.

However, we do not believe that our higher education system can be configured by market forces alone. First, we need a system that actively champions excellence in teaching and learning, and this cannot be achieved by relying just on choice and competition. While it is not the place of policymakers to dictate how autonomous universities should design their provision, we make a number of suggestions that we believe will build on successful practice and promote excellence throughout the system:

- **Higher education institutions should strengthen the active participation of students in improving teaching and learning**, through ensuring student representation in formal structures, conducting joint research projects with staff and other students, and engaging in peer-to-peer teaching schemes.

- **English higher education institutions should embrace the potential of new technologies by recognising credit from low-cost online courses – so-called ‘massive open online courses’, or MOOCs – so that these may count, in part, towards degree programmes.** This would be a very powerful way of delivering part-time distance learning at no extra cost to the state. Accreditation could either be done by the higher education institution providing the MOOC or overseen by the Open University. To make a start down this road we recommend that the Open University should accredit MOOCs provided via the FutureLearn platform so that they can count towards degree programmes offered by the OU itself and its partner institutions.

- **All universities should follow the example of those that have created an established career path for academics who want to focus on teaching.** This career path should have equivalent progression opportunities, pay and reward as are offered to staff on a research path. Universities should also require that all academic staff with teaching obligations undertake training in teaching and assessment as part of their probation period.

Second, there ought to be collaboration as well as competition between universities. In particular, we believe that improved collaboration can help students to enter and transfer within the system.
To enable greater transferability throughout the system:

• HEFCE (the Higher Education Funding Council for England) should exempt those students that transfer directly from one institution to another from student number controls.

• Higher education institutions should be encouraged to establish transfer arrangements with other institutions, both regionally and nationally. The regulator should include accreditation of prior learning as a good practice in access agreements. It should also set benchmarks for how many transfer students institutions should aim to admit.

• HESA (the Higher Education Statistics Agency) should collect data on the extent to which institutions engage in transfers and accredit previous qualifications of students.

Improved collaboration around research will be increasingly important so that institutions can collectively build up critical mass in particular disciplines. We are likely to see the development of further mergers or federations of universities as a result.

Third, there is a strategic role for the state as a guarantor of the wider public and national interest, to monitor the financial health of institutions, to safeguard vulnerable but strategically important subjects such as foreign languages, and to regulate entry into the system to ensure that quality is sustained. To provide a new champion for the student and the wider public interest we recommend that HEFCE, the Quality Assurance Agency (QAA) and the Office for Fair Access (OFFA) should be merged into a single higher education regulator. This will reduce bureaucracy by simplifying the relationship between universities and government.

In particular we recommend that the regulator should act to ensure the international competitiveness of higher education institutions across England. Where necessary it should encourage institutions to collaborate in regional or other federations to secure research funding, as many are now doing. The regulator should also monitor the financial health of higher education institutions and where necessary facilitate federations or mergers between universities.

We believe that new entrants can encourage innovation, promote competition and meet particular areas of demand. However, we believe that degree-awarding powers should only be given to those institutions that exceed demanding quality thresholds, that such powers should never be bought or sold, and that the title of ‘university’ should be reserved for institutions oriented towards the public good.
Funding the future
As a nation, we must continue to invest in the future. Although higher education will need to contribute towards deficit reduction, spending cuts must not be allowed to degrade the critical contribution universities and colleges make to economic prosperity and social justice. It will, therefore, be necessary to identify ways to ‘weather the storm’ of spending cuts such that its contribution in these areas is not put at risk. We project that higher education will be asked to make a cut of more than £1.2 billion in the next spending review period to 2017/18.

In response to spending cuts we argue that the current proportion of 18–21-year-olds in higher education be held constant until 2021. Because of demographic decline in the number of young people in the years ahead, this means that the overall number of 18–21-year-old students would actually fall, allowing a saving of £1.5–3 billion over a seven-year period to contribute to deficit reduction. Over this time period, any expansion in places should come from the creation of low-cost £5,000 ‘fee-only’ degrees outlined above.

We recognise too that universities must contribute efficiency gains of their own to the task of fiscal consolidation, and recommend that the £9,000 tuition fee and teaching grants should be held constant in cash terms until the end of the next spending review period. As recommended already, we call for the science and research budget to be ring-fenced and protected in cash terms until 2017/18. Once the structural deficit has been eliminated we should then increase this budget each year above inflation over a 10-year period. Government accounting rules make it difficult to secure savings through the student loan system that can contribute materially to deficit reduction in the next parliament, although incremental changes to maintenance support are a possible source of revenue.

Looking to the medium term, we have concluded that the current student funding system is unsustainable. The government currently predicts that 34 per cent of the total value of student loans will go unpaid, but our modelling suggests that a more realistic figure is 40 per cent, exposing the Treasury to an additional £545 million of loss in the long term. Reforms should therefore be considered to the funding of students.

We argue that any system must protect university autonomy, be fair to students across all social backgrounds and modes of study, not place all of the burden on the generation currently going through university, and be sustainable for the public purse.

We have modelled a range of alternatives to the current system, examining their cost to the government and their fairness to graduates, universities and the taxpayer. We hope this menu of options will help to inform the debate on higher education funding between now and the general election.
Conclusion

Britain is going through a tough time economically and socially. People are asking where the jobs of the future will come from and whether the next generation will see fewer opportunities than their parents did. In the face of this uncertainty the global strength of our higher education system stands out as a cause for confidence. Our immediate task is to get through the difficult years ahead while protecting investment in this vital national asset and implementing reforms so that our universities are better deployed to meet our social and economic needs. If Britain can follow the path set out in this report, we are confident that we can emerge from the years of austerity with our universities in good health and capable of playing a powerful role in a fairer, more innovative and prosperous future.

Summary of recommendations

1. Higher education opportunities should continue to expand. While resources are constrained in the next parliament, we should sustain the current proportion of 18–21-year-olds entering higher education until 2020, while focusing additional places on locally available, flexible and low-cost courses, aimed in particular at those who seek vocational-oriented learning.

2. Universities and further education colleges should be able to bid to provide new £5,000 ‘fee only’ degrees, focused on vocational learning and offered to local students who would be eligible for fee loans but not maintenance support.

3. The government should consider reforms to the approximately £5 billion that companies receive in training tax relief, with a view to better incentivising employers to invest in courses leading to accredited qualifications and continuing professional development, whether in further or higher education.

4. We must strengthen our systems of vocational provision and in particular our provision of advanced vocational learning through further education colleges. More of these institutions should be given the ability to award degrees and granted the renewed use of the title ‘polytechnic’.

5. We should continue to ring-fence and sustain in cash terms the science and research budget through the next spending review period until 2017/18. Because this implies a continued real-terms decline in funding, we argue that once the structural deficit in the public finances has been eradicated we should commit to a 10-year strategy of raising public investment in research each year above inflation.
6. We should reallocate approximately £1 billion a year that is mainly spent inefficiently on R&D tax incentives to instead set up a national network of Applied Research and Innovation Centres focused on boosting applied research in the strategic industries of the future and on revitalising regions with below-average growth.

7. Universities in Britain should follow the best practice of the US Ivy League in recruiting and ‘crafting’ diverse and representative student intakes. This is to ensure that students are educated not merely for individual advancement but also to be effective and responsible leaders with an understanding of an increasingly diverse society and interconnected world.

8. Funding should be shifted out of fee waivers and bursaries and into outreach programmes, which have a stronger track-record of recruiting applicants from disadvantaged backgrounds. Where possible, these should be delivered collaboratively by higher education institutions in the same city-region.

9. A student premium should be introduced of £1,000 extra per student from a low-participation area or who has received free school meals, in order to recognise the additional cost of their learning and recruitment. This would be funded by reallocating existing widening participation resources and the abolition of the national scholarship programme.

10. Institutions that currently have a small core allocation of places should be able to recruit unlimited numbers of students who are eligible for the student premium, in the same way as they are currently free to recruit students with grades ABB+. This will enable them to make contextual offers to this group.

11. More widespread use of contextual admissions data should be promoted so that lower offers can be made to students from disadvantaged backgrounds. This will be enabled by exempting 10 per cent of the lowest grades from entry tariff calculations in university league tables, provided universities commit to using them for contextual offers.

12. Eligibility for part-time loans should be extended to tackle the crisis in part-time learning.
13. International students should to be removed from the net migration target and the rules governing post-study work should be revised, to ensure that the UK’s HE sector can compete on a global stage.

14. A new postgraduate loans system should be introduced to enable fair and wider access to postgraduate courses.

15. Higher education institutions should strengthen the active participation of students in improving teaching and learning.

16. English higher education institutions should embrace the potential of new technologies by recognising credit from low-cost online courses so that these may count, in part, towards degree programmes. To make a start down this road we recommend that the Open University should accredit MOOCs provided via the FutureLearn platform so that they can count towards degree programmes offered by the OU itself and its partner institutions.

17. All universities should follow the example of those that have created an established career path for academics who want to focus on teaching.

18. To enable greater transferability throughout the system:
   - HEFCE should exempt those students that transfer directly from one institution to another from student number controls.
   - Higher education institutions should be encouraged to establish transfer arrangements with other institutions, both regionally and nationally. The regulator should include accreditation of prior learning as a good practice in access agreements. It should also set benchmarks for how many transfer students institutions should aim to admit.
   - HESA should collect data on the extent to which institutions engage in transfers and accredit previous qualifications of students.

19. We recommend that HEFCE, QAA and OFFA should be merged into a single higher education regulator. This will reduce bureaucracy by simplifying the relationship between universities and government.
20. The regulator should act to ensure the international competitiveness of higher education institutions across England. Where necessary it should encourage institutions to collaborate in regional or other federations to secure research funding, as many are now doing. The regulator should also monitor the financial health of higher education institutions and where necessary facilitate federations or mergers between universities.

21. Degree-awarding powers should only be given to those institutions that exceed demanding quality thresholds, such powers should never be bought or sold, and the title of ‘university’ should be reserved for institutions oriented towards the public good.

22. In order that universities contribute efficiency gains of their own to the task of fiscal consolidation, the £9,000 tuition fee and teaching grants should be held constant in cash terms until the end of the next spending review period in 2017/18.

23. The current student funding system is unsustainable and should be reformed. Any system must protect university autonomy, be fair to students across all social backgrounds and modes of study, not place all of the burden on the generation currently going through university, and be sustainable for the public purse. We have modelled a range of alternatives to the current system, examining their cost to the government and their fairness to graduates, universities and the taxpayer. We hope this menu of options will help to inform the debate on higher education funding between now and the general election.
It is 50 years since the landmark Robbins report on higher education in Britain was published. In that time, higher education has been transformed from an elite system to one in which nearly half of all young people and more than a million mature students participate. Universities and colleges of higher education are now a major civic presence in almost every part of the country and their contribution to the national economy is immense. Research in British universities is world-class, second only to that in the United States.

There is much to be proud of: at the start of the 21st century our universities provide us with a significant national economic advantage as well as a vital public good. But we face growing future challenges, including increased competition for students from universities overseas, the rise of new modes of learning, particularly in the form of low-cost online courses, and a period of unprecedented cuts to public spending, which, unless carefully managed, will impinge on our capacity to invest in the productive potential of our people.

In this report, the Commission on the Future of Higher Education sets out how we can continue to expand and reform higher education, protecting research and learning in our universities and colleges through a further phase of fiscal retrenchment, while ensuring that the sector is equipped to play a leading role in the economic and social renewal of Britain as the country enters the 2020s. We range across the full spectrum of issues affecting higher education, while focusing our key recommendations on how the sector can help to promote a rebalanced, productive and resilient economy, expand access to opportunity and advance social justice, and respond to the major forces that are reshaping the demands placed on it by students, employers and the wider community.

At each stage, we consider higher education in an international context, while focusing our specific conclusions on the sector in England.

1.1 The scope and purpose of the Commission
The aim of the Commission on the Future of Higher Education was to set out a plan for how our higher education system can flourish in the next 10 to 20 years, so that it is better able to meet our national economic and social needs.
In doing so, we have had to undertake two tasks. First, we had to recognise that higher education is not immune from the short-term financial pressures facing the country. It is very likely that substantial public funding cuts will affect higher education over the next few years whichever government is in power. As a result, we have had to try to find a path through this continued period of austerity while protecting what is a vital national asset and an essential investment in our future prosperity.

Second, we had to consider the longer-term role of our higher education system. We have therefore sought to combine a strategy to ‘get through’ further fiscal retrenchment in the next parliament with one that outlines a range of reforms to ensure that universities are able to play a powerful role in our economic and social renewal in the 2020s.

Before undertaking those two tasks, we made a number of strategic decisions. First, we recognised that it is neither right nor effective for government to simply dictate the shape of our higher education system. The autonomy of our higher education institutions (HEIs) is a key source of strength for the sector, ensuring it is free to shape its own destiny. In addition, the fact that many universities now have overseas operations means that setting policy in this area cannot be as definite and coordinated as perhaps it was in the past, when it was limited to solely national concerns.

Second, we decided to concentrate on the English higher education system. The resources at our disposal, combined with the fact that the devolved administrations have seen marked degrees of divergence – which mean that a common agenda is no longer necessarily realistic or desirable – made this a straightforward choice. No doubt future commissions will examine the challenges facing universities in other parts of the UK, and we hope that the thinking contained in this report will help to inform public debate in Scotland, Wales and Northern Ireland.¹

Third, we have restricted our scope to what we consider to be the most strategically important issues. Again, this was partly a matter of resources – however, it was also a matter of addressing the key issues adequately. The fact that we have not covered everything to do with English universities is a matter of intentional focus, not of a decision to downgrade or dismiss other issues.

Finally, we have taken evidence from a number of bodies and organisations. But, in contrast with Robbins, we have been able to draw on many more secondary sources of evidence. Since the 1960s, a vast thicket of bodies has grown up that have made higher education

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¹ Throughout this report, we do sometimes refer to the United Kingdom, generally because much of the supporting statistical evidence concerns the UK as a whole rather than England specifically.
their business. Regulatory bodies of various stripes, foundations, consultancies, thinktanks, research centres and individual academics specialising in higher education all now provide a formidable array of evidence upon which we have been able to draw.

1.2 The report structure
Our report starts by describing the changes that have affected English higher education since 1963 and those social and economic forces that will shape it into the foreseeable future. Having set up that challenge, we argue – as did Robbins – that it is of vital importance to agree a set of principles that can provide the system with a clear sense of direction in the years ahead. These principles will help us to retain what has historically been among our system’s greatest strengths: that it provides for the disinterested pursuit of knowledge, that it develops informed and sceptical citizens, that it serves the wider public good, that it expands opportunity, and that it plays a vital role in building an economy fit for the future.

The report then turns to what we regard as the most vital national needs that our universities and colleges can help us to meet, and sets out a number of reforms so that they are better able to do so.

First, our higher education system must help us to rebuild our economy following one of the most catastrophic economic crises in decades. In this damaged economic landscape, higher education stands tall as a vital strategic asset. In chapter 3, we set out how the higher education system can help us to provide the highly skilled workforce required in the knowledge economy of the future, how it can remain one of our most successful export sectors, and how it can help to strengthen research and innovation.

Second, we explore the role of higher education in expanding opportunity (see chapter 4). England remains a very divided country in socioeconomic terms, with too many young people leaving school and college without decent qualifications and unable to enjoy the enormous opportunities that higher education brings. While we recognise that the root cause of this problem lies earlier in life, we also believe that higher education institutions themselves have a duty to play their part in opening up opportunities for those who typically have few. Our system has also never been properly geared towards enabling part-time study for those in work and raising families. We set out a package of measures to help rectify this.

The final two substantive chapters describe how we can strengthen our higher education system so that it stands on the firmest possible footing in seeking to achieve those key national objectives.

In chapter 5, we argue that the system must become more flexible and responsive so that it can best meet the changing needs of the
students of the future. This encompasses how courses are taught, how technology is deployed, and how the system is regulated in both students’ and the public interest.

In chapter 6, we describe the funding challenges that face the system both in the short and longer term. For the period of the next parliament we set out a package of measures that we believe will help the system to ‘weather the storm’ of continued fiscal retrenchment. For the long term, we argue that the current student finance system is unsustainable and requires bold reform. We set out a menu of costed alternatives which we hope will inform public debate in the run-up to the next election.
In the 50 years since the Robbins report was published England’s system of higher education has expanded and diversified beyond recognition. Moreover, it now faces a set of new challenges, including increased competition from universities overseas, the rise of low-cost online modes of study and a period of unprecedented austerity, which impinges on our capacity as a nation to invest at a time when more and more of our competitors are continuing to invest.

This chapter sets out how our higher education system has changed in recent decades and describes the future challenges it faces. It is our conviction that as our system adapts to this new landscape it cannot do so effectively without being anchored by a set of guiding principles. Higher education is too important to our society, our economy and our future prospects for us to take a laissez-faire approach. We need to be clear as a country about the kind of higher education system we want. The Commission therefore sets out a number of principles which we believe should shape the direction of the system in the decades ahead.

2.1 The changing landscape
In what follows we describe the major changes that have shaped and will continue to shape the English higher education landscape. These forces set the context within which our deliberations have taken place and which together pose the main challenges to which the rest of the report is addressed.

Participation
The first and most obvious change is one of scale. In the early 20th century, the university sector was relatively stable, generally serving a small number of students preparing for academic life or elite professions. At the end of the second world war there were only a dozen universities in England, providing higher education to fewer than 10 per cent of school-leavers. By the 1960s, a rising tide of economic development, greater social mobility and a large post-war baby boom led to demands for an expansion of the sector. Acting on the advice of the Robbins report, the government set about making a concerted effort to increase the number of university places. This period saw the growth of so-called ‘plate-glass universities’, such as Lancaster, Sussex, York and Warwick.
In an attempt to ensure working-class communities benefited from the expansion of tertiary education at this time, the education secretary Anthony Crosland oversaw the establishment of 30 polytechnics and the Open University. Unlike the plate-glass universities, polytechnics tended to serve their local communities and offered more vocational-oriented qualifications accredited by professional bodies. By the early 1970s, England was on the path to establishing a more open and expansive higher education sector, with one in seven school-leavers enrolling at either a university or polytechnic.

A further expansion of higher education towards the end of the 1980s was overseen by Kenneth Baker, largely in response to the fact that more pupils were staying on at school after age 16, following the introduction of the GCSE. By 1990, the proportion of 18-year-olds participating in higher education had risen to one in five.

By the early 1990s, there was a growing need to deliver more graduate degrees at a lower unit cost. This partly reflected the funding pressures on the system, but it also reflected wider changes in the labour market, which increasingly privileged high-skilled knowledge workers over skilled trade jobs – degrees were the currency of the day. These pressures led, in 1992, to polytechnics becoming universities with the power to award degrees. The binary divide between polytechnics and universities had been broken, and within 20 years the so-called ‘new universities’ had grown to admit the same number of students as the older universities in England.

Under the 1997–2010 Labour government the funding pressures on the system were met through the introduction of student fees, which once again enabled higher education to expand. The number of UK-domiciled...
students in higher education increased by 19 per cent between 2000/01 to 2010/11, from 1,731,570 to 2,061,410 students. As figure 2.1 shows, the participation rate for English-domiciled students in higher education in England, Wales and Scotland increased by 10.1 percentage points in the 12-year period from 1999/00 to 2011/12.

Rising participation in higher education is not unique to the UK. Rather, it is a global phenomenon that is intertwined with the shift to post-industrial economies across western countries in the second half of the 20th century (Altbach et al 2009: iv). The emergence of service and knowledge industries gave rise to sharp increases in the demand for complex communication and advanced analytical skills, and this resulted in a rapidly increasing demand for education in many countries (ibid).

Nearly all countries in the world have dramatically increased their higher education participation rates. The most dramatic gains have been recorded in middle and upper-income countries, especially in central and eastern Europe, Latin America, central Asia and east Asia. Today, China and India have the world’s largest and third-largest academic systems respectively (ibid: iv–v). By 2020, China alone will account for 29 per cent of all the university graduates in the world aged 25–34. In absolute numbers, that will mean there will be as many Chinese graduates in that age-group as in the entire US labour force (Barber et al 2013).

Figure 2.2
Population that has attained higher education, by age-group, 2010 (%)

Source: OECD 2012a

However, in this area at least, Britain has started the new century ahead of the pack. The UK ranks fourth among OECD countries on the proportion of people aged 25–34 who have completed higher education.
It is ahead of countries like Australia, the US, Japan and New Zealand on this measure, and it is well above the OECD and EU-21 average.\(^2\)

Nevertheless, we should note that while participation has increased in England, university has remained beyond the reach of many people. Figure 2.3 shows higher education participation rates by local area, with those born in the wealthiest areas being much more likely to go to university than those born in the poorest neighbourhoods. Moreover, as we set out in chapter 4, our most selective higher education courses are also those with the most socially privileged student intakes. Higher education can be a force for expanding opportunity, but we have much to do if we are to fully unlock its potential.

![Figure 2.3](image)

Source: HEFCE 2010
* Provisional; ** Estimated
Notes: Each line represents the young participation rate for different areas, measured by POLAR 2 quintiles. The purple line therefore represents the one-fifth most advantaged neighbourhoods, and the orange line represents the one-fifth least advantaged neighbourhoods.

**Diversity**

The expansion of higher education has been accompanied by growing diversity in the institutions providing it. This is most commonly thought of in terms of a two-tier system, divided between ‘research-intensive’ institutions on the one hand, and those institutions that are mainly teaching-focused on the other.

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2 The OECD defines ‘tertiary type A’ education as programmes with a minimum of three years’ duration, mainly theory-based, and suitable for progressing to advanced research programmes and professional jobs. Conversely, ‘tertiary type B’ courses focus on practical, technical or occupational skills for direct entry into the labour market, and are generally two years in length.
The distribution of public funding for research varies greatly from institution to institution (see figure 2.4), which means that some institutions are far more reliant on teaching than research income.

The introduction of the Research Assessment Exercise (RAE) in the 1980s, which was later replaced by the Research Excellence Framework (REF), has enabled universities to compete for research funding on the basis of quality. Universities with a strong existing track-record in high-quality research have been able to dominate the competition for quality-related (QR) funding streams: in 2012/13, five institutions will go away with more than a third of the total QR budget (HEFCE 2013a).

However, diversity is not simply a matter of research-intensiveness. Figures 2.5, 2.6, and 2.7 (over) show how varied the sector is in terms of the number of students admitted, levels of student satisfaction with teaching, and post-graduation destinations.

Connected to this growing diversity at the institutional level has been a greater diversity in modes of study. This is a global trend, and has come about principally to cater for larger numbers of older students and part-time students (Altbach et al 2009: xvii). As labour markets have become more flexible, a larger number of adults have needed to retrain; careers no longer progress in a simple linear fashion.

In England, we have always struggled to provide effectively for this group. Although the absolute number of part-time students has increased over the last 20 years, this rise has lagged behind the more dramatic increase seen in the number of full-time students. As a result, the proportion of people studying part-time at English HEIs decreased from 39.4 per cent in 2000/01 to 35.7 per cent in 2009/10 (UUK 2011a: 11). To compound matters, the increase in tuition fees appears also to have deterred part-time
Figure 2.5
Numbers of students across English HEIs

Source: HESA 2012b
Note: Excludes the Open University, which had 208,710 students in 2010/11.

Figure 2.6
Satisfaction with teaching across English HEIs, as reported in the National Student Survey (%)

Source: Guardian 2012

Figure 2.7
First degree leavers ‘assumed to be unemployed’ approximately six months after graduation across English HEIs, 2010/11 (%)

Source: HESA 2012c
and mature students from applying to higher education. As we show in chapter 4, there has been a dramatic 40 per cent decline in the number of part-time students applying since 2010.

The Robbins report argued for an expansion in what we might call ‘traditional higher education’, based originally on the Oxbridge model. However, events since have shown that what was actually required was not just a larger but also a more variegated system, focused on meeting a wider range of needs. Indeed, it is worth pointing out that most high-participation systems tend to offer a diverse range of pathways and modes of delivery, most notably the US with its mixture of universities and community colleges. The most important questions for the future are whether we have the right mix of institutions and modes of study to meet the demands of a more diverse student population, and whether our system is sufficiently flexible to respond to future needs.

**Internationalisation**

In 1963, English higher education existed relatively self-contained within its own national borders. Today, by contrast, it is exposed to enormous pressures from global competition for students, staff and research funding.

*International students coming to England*

As one of the most popular destinations for international students, English universities have a rich history as globally engaged institutions catering for students from all over the world. The number of non-UK EU students in higher education in the UK increased by 48 per cent between 2000/01 and 2010/11. But it is the number of students coming from outside the EU which has seen the biggest rise, increasing by an astounding 139 per cent in the same time period (see table 2.1). The past decade has seen a particularly significant growth in the numbers of students coming from China, India and Nigeria (UUK 2012a: 18).

<table>
<thead>
<tr>
<th>Domicile</th>
<th>2000/01</th>
<th>2011/12</th>
<th>Percentage change</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>1,731,570</td>
<td>2,061,410</td>
<td>19%</td>
</tr>
<tr>
<td>Other EU</td>
<td>89,840</td>
<td>132,550</td>
<td>48%</td>
</tr>
<tr>
<td>Non-EU</td>
<td>126,720</td>
<td>302,680</td>
<td>139%</td>
</tr>
<tr>
<td>Total</td>
<td>1,948,135</td>
<td>2,496,645</td>
<td>28%</td>
</tr>
</tbody>
</table>

Source: UUK 2011a and HESA 2013a

According to the OECD, international students make up 16 per cent of the total student population in UK HEIs. The only countries with a larger proportion of international students in their higher education systems are Luxembourg with 26 per cent and Australia with 21 per cent.

However, although there has been a significant growth in the number of international students in the UK, its share of the international student market actually saw a small decrease between 2000 and 2009 from 10.8 per cent to 9.9 per cent.
This indicates that the international student market is not only growing quickly, it is also becoming more competitive. International students are increasingly looking to other destinations to pursue higher education. Australia, the Russian Federation, Spain, New Zealand, Italy and the Netherlands are among the countries that saw their share of the international student market increase between 2000 and 2009, while traditionally popular destinations like the US and Germany, like the UK, saw their shares decrease in the same time period (OECD 2012a). As we show in chapter 3, recent changes to visa rules could be damaging our competitiveness in this area.

**Universities as global players**

Internationalisation is not just a matter of more foreign students coming to study at English universities: it is also about universities themselves becoming multinational institutions. Universities from the US, Canada, Australia and China are setting up branches overseas. One Chinese university has already announced plans to set up in Malaysia; southeast Asian countries like Malaysia and Singapore are following suit. Middle Eastern countries like Abu Dhabi and Qatar are also involved in the hosting of overseas universities on their territory.

English universities have a long history of study abroad and exchange programmes with foreign universities. They are increasingly offering more long-distance learning to international students, twinning with other universities to provide joint or dual degrees, and setting up fully-fledged branch campuses abroad. As a result of transnational education, more international students are now working towards UK degrees overseas than at home (Marcus 2011).
Case study: Nottingham University moves to Malaysia and China

The University of Nottingham became the first British university to open a purpose-built campus outside of the UK when it inaugurated its Semenyih Campus, outside Kuala Lumpur, in August 2005. It had been providing transnational education in Malaysia for five years prior to opening the new campus. Later in 2005 it launched an even more ambitious project, in the Zhejiang province in China, when it became the first foreign university to open an independent campus in that country. Nottingham has been awarded two Queen’s Awards in recognition for its innovation in establishing campuses overseas, and its Malaysian branch has developed to become the highest-ranking HEI in Malaysia. The university is currently in negotiations with the Shanghai authorities about opening an independent campus in their city as well (Baskerville et al 2011: 26).

The pressure on universities to compete at a global level presents some difficult choices. It is worth noting that there are few universities in the Times Higher Education world top 100 with a turnover of less than £800 million. There appears to be a correlation between size and global success. In response, many European countries are concentrating research resources – sometimes, as in France and Denmark, through an explicit policy of amalgamation of universities, sometimes through new competitive regimes, as in Germany.

Most English universities are below this internationally competitive size. This could imply that more of our universities will need to collaborate, federate or even merge in the future to enhance their global prospects. We should note that a number of regional consortia of research-intensive universities, like the N8, M5, GW4 and SES5, have already emerged. We may also in the future start to see cross-border amalgamations, so that universities grow via amalgamation with universities overseas. Belonging to an internationalised university could bring competitive advantages, including enhancing institutional autonomy, allowing staff to work in numerous jurisdictions and providing accelerated career opportunities.

Technology

Higher education is being affected profoundly by the rapid development of information and communication technologies. It is now possible for vast amounts of content to be made available online at effectively zero cost, and increasingly it is possible for good feedback and assessment to take place at distance, over the internet.

These online alternatives to the traditional campus experience are likely to pose a serious competitive challenge to universities in the
years ahead. In large part this is because they can provide a learning experience at a much lower cost. Internationally, the amount students are expected to pay for their degrees has been rising: as we have seen in England, tuition fees have risen from £1,000 to £9,000 a year in the course of a decade, while in the US prices for undergraduate tuition, room and board have increased at public and private institutions by 42 per cent and 31 per cent respectively, after inflation (Barber et al 2013).

At the same time, the value of a degree in terms of lifetime earnings has been falling as the graduate population has increased. The average earnings for US students with a bachelor’s degree fell 14.7 per cent between 2000 and 2012, despite a 72 per cent increase in cost (ibid). As we show in chapter 3, the graduate premium has also been falling in the UK.

This combination of a falling graduate premium and rising fees is likely to mean that universities will face intense competition from low-cost online alternatives to the traditional three-year residential degree.

In particular, the last few years have seen the rise of the so-called MOOC – or massive open online course – which is free of charge and accessible online by anyone around the world. Of course, distance learning has long been a part of our higher education system – not least since the invention of the Open University – however, the quality of the online experience is now much improved, due to technological improvements and increased investment in MOOCs by traditional higher education actors. What MOOCs offer is open access to a curriculum, which is particularly useful for those basic courses that make up most of those at undergraduate level.

MOOCs have taken off in particular in the US. Coursera was developed at Stanford and now has 200 courses, 30 universities and 1 million registered learners. It is now accrediting learning upon completion in partnership with the American Council of Education. EdX was started by MIT and Harvard; Udacity offers courses in science and computer programming. In England, a number of institutions have signed up to FutureLearn, an online university, which is based out of the Open University but offers online courses delivered by numerous UK institutions.

In order to remain relevant, universities will increasingly have to demonstrate more clearly to students what they can offer that these online alternatives cannot: whether that is reputation, rich and interactive forms of tuition, lectures and classes by world-leading researchers, opportunities to extend social networks, or life-changing experiences. They will also have to interweave new technologies into their provision. Already there are numerous companies offering online learning tools to HEIs, enabling them to deliver more of their curriculum, feedback and assessment online. Such innovations should reduce costs and potentially tuition fees in the future – we explore these possibilities further in chapter 5.
The knowledge economy
Whereas in the past higher education existed at one step removed from the national economic life, HEIs have become an increasingly important part of the knowledge economy. While universities are rightly disinterested and systematic producers of knowledge, they have also become an integral part of the economy, as generators of advanced skills, research and innovation. If England is to compete in the growing knowledge-intensive industries of the future then its universities must be at the heart of its economic strategy.

Higher education institutions have come to play four important roles in driving growth.

First, the research capacity of modern economies is an essential part of the supply chain of knowledge and innovation, particularly because the generation of high-end knowledge and innovation is increasingly concentrated in universities as companies have withdrawn from research and development (R&D). England’s universities rank among the best in the world when it comes to the quality of their research – a remarkable achievement when one considers that we invest much less in R&D as a proportion of GDP than most of our leading competitors.

Second, HEIs improve the competitiveness of economies, since their graduates, by obtaining higher education qualifications, lead skill-biased technological change and drive higher labour productivity. In other words, they provide the upper end of the workforce, which is needed to be both more creative in order to spur innovation and in order to boost productivity (Goldin and Katz 2008).

Third, universities and colleges are vital linchpins of regional economies. Higher education institutions directly employ staff, invest in infrastructure and purchase local goods and services. They can attract highly skilled staff and students to an area and they can also educate and train the existing local workforce. Graduate retention figures show that universities and colleges are important for boosting skills in lagging regions (Schmuecker and Cook 2012). They can also act as the entry point for foreign firms to access regional markets (Guimón 2008).

Finally, higher education has become an industrial sector in its own right. It is a vital – and remarkably successful – part of the British economy, comparable in scale to the printing and publishing and legal industries, and larger than pharmaceuticals, aircraft and spacecraft, or advertising. The figures are much-cited but no less impressive for that: the UK higher education sector had an income of £23.4 billion a year in 2007/08, produced gross export earnings of £5.3 billion, and employed more than 1 per cent of the UK’s total workforce. So far as its wider economic impact was concerned, the sector generated over £59 billion of output (UUK 2011b).
As we seek to rebuild and rebalance our economy in the aftermath of an historic financial crisis, our higher education system will play a crucial role. However, we must do more to ensure that our higher education system is deployed most effectively towards meeting our national economic needs. In terms of research, private sector R&D is far too low and university–business collaboration lags behind that of our major competitors. We therefore need to ensure applied research is meeting the needs of the economy, especially in the lagging regions. In terms of skills, the recent recession has led to high graduate unemployment and increasing numbers of graduates working in jobs that are not commensurate with their skills. Unemployment among those who graduated within the last two years rose from 10.2 per cent at the end of 2007 to 18.9 per cent at the end of 2011 (ONS 2012).

Meanwhile, the wage premium for graduates has stayed flat over the last decade, while the shortage of intermediate and technical skills has grown more acute. It is therefore essential that we act to sustain employer demand for higher-level skills, and that we strengthen our provision of intermediate level technical education and training.

**Funding**

The expansion of higher education in England has been accompanied by the thorny question of how to pay for it. In general, as countries develop they face pressure to expand their education systems and spend a greater share of their resources on them.

The UK has struggled to keep up with other countries in terms of investment in higher education. As figure 2.9 illustrates, we spend less on higher education as a proportion of GDP than the majority of OECD countries, and a significant proportion of what is spent comes from private sources.³

In response to the pressure to spend more on higher education, a number of countries have turned to tuition fees to help foot the bill, representing a general trend towards greater use of private funding for higher education. Since 1995, 14 out of 25 OECD countries have implemented tuition fee reforms, increasing both fees for individual students and the public subsidies available to support them (OECD 2011a).

In England, tuition fees have risen steeply, from £1,000 when they were first introduced in 1998 to a maximum of £9,000 in 2012. Rising fees have been accompanied by a great deal of political and popular protest, but the principle of students contributing towards the cost of their studies has now become firmly established in the system.

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³ The picture is more positive when you consider the amount that the UK spends per student, where we perform a little above the OECD average.
Looking to the future we face two connected challenges. First, because the pace of economic recovery has been much slower than the government expected, there will be further spending cuts in the next parliament – higher education will not be immune from these. As we show in chapter 6, over the next six years the Department for Business, Innovation and Skills (BIS) will have to make a further cut of £2.2 billion in its budget (an additional real-terms cut of 22.8 per cent), assuming the projected pace of deficit reduction is maintained at its current level. If the government continues to protect science and research spending by holding it flat in cash terms then the rest of the BIS budget is likely to be reduced by nearly a third.

Higher education institutions were relatively well protected from spending cuts over the course of this parliament, as their lost income was replaced by higher tuition fees. With tuition fees having already replaced the majority of teaching grants, this option will not be available next time around. Therefore, the immediate challenge facing higher education is to navigate its way through another period of public spending cuts. It is essential that this is done in a way that does not do lasting damage to one of the nation’s most precious assets, and that leaves the sector well-placed to flourish in the future.

Evidence from other countries can provide a guide for the best way to get through a period of deep fiscal consolidation. In the mid-1990s, Sweden was faced with a huge deficit following the catastrophic bursting of a giant asset bubble and the collapse of its banks. It embarked on an aggressive programme of public spending cuts...
and tax rises, and by 1998 the country was back in surplus. The key to their success was the decision to protect public services that supported employment and economic growth. Workers were given extensive skills retraining, Sweden’s education system was spared large cuts, and welfare payments that supported people back into work were prioritised. These measures laid the foundations for Sweden’s success in the following decade (see Nuder 2012).

Following the most recent economic crisis, Sweden has once again decided to invest in those things that will promote future growth and prosperity, announcing big investments in infrastructure, innovation, science and research, and vocational and higher education places for young people. We return to how England might follow this example in chapter 6 of this report.

Second, looking beyond the next parliament, we need a funding settlement that will support the sector in the long term. Soon after winning the general election, the Coalition government announced its plan to increase fees to £9,000 and reform maintenance and repayment arrangements. Lying behind these reforms was a need to cut public spending and reduce the deficit, but they were also underpinned by a desire to reduce central planning and increase competition in the sector.

However, there are concerns about the long-term viability of this system, which we set out later in this report. We show that the government has underestimated the amount the taxpayer will have to subsidise student loans in the future, by overestimating the amount of loans that will be repaid. Once this black hole starts to open up in the public accounts there will be pressure to cut essential current spending in the short term, in areas such as science and research. Again, we return in chapter 6 to explore how we can reform the funding system to put it on a more sustainable footing.

Conclusion

Since the 1960s, England has witnessed a rapid evolution of its higher education system. It has moved from a cluster of elite institutions towards a mass education system serving nearly half of all school-leavers. In general, the sector has adapted well to the challenges of the past half-century. But there are new clouds on the horizon. In the coming years it will have to adapt to tighter spending limits, high graduate unemployment and greater competition from overseas. These challenges mean that established narratives will need to be questioned and that the system must be prepared to change and adapt.
2.2 Enduring principles

It is therefore vital that our higher education system is anchored around a set of principles that enable it to respond effectively to change, while holding on to what is most valuable from its past. As Robbins (1963) put it, ‘higher education is so obviously and rightly a matter of great public concern … that it is difficult to defend the … absence of co-ordinating principles and of a general conception of objectives’.

We believe that our universities and government policy towards them should be shaped by five principles.

First, higher education institutions must be disinterested producers of knowledge. Universities are now becoming one of the only concerted producers of systematic new knowledge in the world, as corporations and other actors withdraw from basic research, seeing it as a cost rather than an investment. So, as almost the only such producers, universities bear a heavy responsibility. They are now an integral part of solving the pressing problems that the world faces, from new diseases to global warming.

Second, higher education institutions must nurture sceptical and informed citizens. Universities and colleges are places where people can meet and discuss their differences in a safe and liberal space committed to the values of the enlightenment, often at a formative period in their lives. They must continue to impart something of value beyond simply their ability to educate and transmit various skills. That depends on students teaching things to each other as well as being instructed: interaction between people of different cultures and faiths can produce a quality greater than the sum of its parts. The best universities do this, refusing to simply pressure and programme and rather seeking to instil purpose (Delbanco 2012). There are many sterling examples of attempts by universities to produce this sense of purpose, from volunteering programmes through business start-up and entrepreneurial programmes through to much more ambitious international programmes, meant to relieve poverty and hardship. Encouragingly, many of these programmes have been student-generated.

Third, higher education institutions must promote the public good. Defining the public good is no easy task. There is no obvious method for determining which ‘public’ a university should serve, although they clearly serve a number of different such constituencies, including the local community and region around them, the nation and the wider global community.

What is clear to the Commission is that to be worthy of the name ‘university’ an institution must serve a wider public benefit, beyond their own narrow institutional interest or the pursuit of financial gain.
Fourth, higher education institutions must expand opportunity. Universities are and always have been the preserve of elites, in that they sort and sift potential students through restrictive admissions, examinations, grading and so on, all on the basis of a meritocratic principle. However this meritocratic principle has always existed in tension with a legitimate democratic demand for wider social access to higher education.

Widening participation and promoting fair access has, of course, been a key objective in universities for many years now and progress has been made. But, as numerous reports have documented, many English universities remain socially unbalanced to such a degree that it is difficult to argue that those institutions have no obligation to act. Of course, most of the problem originates early in a would-be student’s life and as a result of wider inequalities in society, but we argue in chapter 4 that universities themselves have a duty to break down barriers and widen access. This is important first of all to promote social mobility for the individual, but also so that our professional and political elites are educated in a diverse environment which at least to some extent reflects the kind of society they will end up leading.

Fifth, higher education institutions must further national economic renewal. Having reached an important point in which they are recognised as economic actors, universities and colleges need to maximize their effectiveness for the sake of a nation which desperately needs economic growth. They must do this both through their teaching of advanced skills and also through their research. This does not mean pursuing a crude utilitarianism in research, which would conflict with our first principle. But it does mean acting to ensure that the world-class research that goes on in our universities feeds through more effectively into innovation in the real economy.
3. HIGHER EDUCATION AND NATIONAL ECONOMIC RENEWAL

Britain faces a challenge of national economic reconstruction as great as any since the years following the second world war. After the collapse of Lehman Brothers, real GDP fell by 6 per cent, unemployment shot up and wages stagnated. This dramatic loss of growth hit tax revenues and left the country with a serious budget deficit. The financial crisis exposed fundamental flaws in Britain’s economic model and deep structural reform is required if we are to get back on the path to sustainable growth and rising living standards.

In this dismal economic landscape, our higher education system stands out as a vital national strategic asset. Our universities are ranked among the best in the world for research and students from all around the globe want to come here to study. The development of the ‘knowledge economy’ over the past 30 years means that higher education now plays a critical role in our economic prospects. We know that investment in higher education helps to increase skill levels, trigger innovation, and create jobs and growth.

Our Commission was concerned with how Britain can make more of this important national asset as we undertake the task of rebuilding our economy. We focused on three areas where our universities and colleges are crucial to our economic prospects: equipping our people with the skills they will need in the future economy, generating export revenues by recruiting more international students, and providing the research that will unlock innovation and raise productivity.

3.1 A skilled workforce

Do we need more or fewer graduates?

Over the past 30 years, there has been a shift in most advanced economies towards activities that create value from exploiting knowledge rather than physical assets and manual labour. As figure 3.1 shows, growth in UK output since the 1970s has largely been driven by knowledge-based services.
This pattern was also reflected in the labour market. Figure 3.2 shows that employment growth was concentrated in more highly skilled service sector jobs in the economic cycle immediately preceding the financial crisis. Just before the onset of recession in 2008, there were 1,970,000 more managers, professionals, associate professionals and technicians in the UK than there were in the middle of 2001 – more than accounting for the growth in aggregate employment over that period. The jobs that have been lost since 2001 were semi-skilled and unskilled ones.

The recent recession has, to some extent, continued the process of economic restructuring away from manual and unskilled jobs. The majority of job losses during the recession were in sectors that do not generally rely on graduate workers – such as manual trades and administration – although there was also a large fall in employment in financial services (Clifton et al 2009).

Knowledge-intensive work tends to rely on high levels of general education and tacit knowledge, rather than tasks and practice written down in manuals, guides and procedures. It uses the types of high-level skills often gained at universities – such as the ability to assimilate, interpret and use a range of specialist information (Levy and Hopkins 2010). As a result of this, the labour market has tended to privilege those with high levels of education.
Since the 1980s, graduates have become more likely to have a job and earn higher wages than those with lower levels of education. In 2008, the earnings of UK tertiary-level graduates aged between 25 and 65 were, on average, 59 per cent higher than the earnings of upper-secondary-level graduates, and tertiary-level graduates were far more likely to work in professional occupations (OECD 2008). In a research paper for BIS, Conlon and Patrignani (2011) estimate that graduate average lifetime earnings are £108,000 more than the earnings of those who left school with two A-levels.4

Looking to future sources of growth in the UK economy, most commentators predict that jobs will generally be created in skilled occupations and sectors that rely more heavily on graduates (Levy et al 2011). The 2010 National Strategic Skills Audit predicted that jobs growth was most likely in the higher skilled occupations of managers, professionals and associate professional/technical occupations. Indeed, it argued that growth in these three groups over the next 10 years is likely to be equivalent to the whole net increase in employment for the

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4 We should note that the average wage premium is an average, and as such it is distorted by significantly higher wages for the top-earning graduates. For example, the top 10 per cent of workers qualified to A-level earn slightly more than the median graduate, and the median workers qualified to A-level earn slightly more than the bottom 10 per cent of graduates.
economy as a whole. These groups account for 43 per cent of jobs today, and may account for 47 per cent by 2017 – a growth of nearly 2.2 million new jobs (UKCES 2010).

Moreover, our main competitors are all expanding higher education for exactly the same reasons: since the recession, Canada, the US, France and Germany have all announced additional spending on higher education and science in an attempt to stimulate their economy. The east Asian economies continue to expand tertiary education as their economies move up the value chain. By 2020, China is projected to produce more graduates than the US and Europe combined (UUK 2011b).

**Focused expansion**

This analysis suggests that we would be wise to continue to expand access to higher education. However, we also know that the state of the public finances will make it difficult to fund any major general expansion in the number of HE places.

We recommend that higher education opportunities should continue to be expanded. However, while resources are constrained in the next parliament, we should sustain the current proportion of 18–21-year-olds entering higher education until 2020, focusing additional places only on locally available, flexible and low-cost courses, aimed in particular at those who seek vocational-oriented learning.

To achieve this, the government should create an additional 20,000 places that are restricted to £5,000 ‘fee only’ degrees, focused on vocational learning and offered to local students who would be eligible for fee loans but not maintenance support. Universities and further education colleges should be able to bid to offer these places.

The current funding system incentivises HEIs to offer full-time, high-fee courses supported by student loans. However, this mode of provision is not appropriate for many potential students, who may wish to study in their local area, live at home, avoid taking on large debts, or combine their studies with paid employment in order to cover living costs. The lack of courses that cater for people in this category is holding back the development of skills in many regions of the country.

The government should therefore incentivise the creation of courses that meet the needs of these potential students. This would have four benefits: it would enable an expansion of places; it would increase choice for students in terms of the modes of study that are available to them; it would create places that do not require large amounts of state subsidy through the student support system; and it would ensure the supply of places is better matched to student and employer demand.

The government’s recent attempt to create low-cost places through its ‘core and margin’ policy has not been effective (see chapter 5 for more detail). It has simply generated a number of places that have slightly
lower tuition fees but which essentially still fit the mould of the traditional full-time, three-year course, with many students living away from home. Consequently, there has not been sufficient demand for these places, with nearly half going unfilled, and they remain expensive to the state, which has to subsidise the fee loans and maintenance costs. The government should reform the core and margin policy so that it is better tied to student demand, encourages greater innovation, and creates places that are genuinely low-cost to both the student and the state.

There are already interesting forms of provision beginning to materialise that fit this description. Some universities, such as Nottingham Trent, are collaborating with employers to offer higher-level apprenticeships, with students enrolled on specially designed foundation degree programmes at the same time as they work for the employer as an apprentice. This form of provision meets the needs of the HEI, since it receives a tuition fee for providing the course. It also meets the needs of the student, who is able to gain a qualification at low cost with direct labour market value, while having their living costs subsidised through their apprenticeship wage. And it meets the needs of employers, who are able to contribute to the design of the course (ensuring it is relevant to the workplace) as well as benefit from the work that the apprentices do for them on a part-time basis.

Finally, it meets the needs of the state, which is able to expand higher education at a low cost through courses that are short, have a low upfront fee, and require no associated maintenance support.

The government should incentivise HEIs to create more places that share these features. It could do this by creating a pool of additional student places which are explicitly designed to be for £5,000 ‘fee only’ courses. Higher education institutions could apply to be given these places, provided the courses meet this criterion. These places would be attractive to HEIs that wished to expand their student numbers, or were struggling to fill their full-cost places. These courses would represent a very low cost to the state, as it would not have to pay any maintenance grant, national scholarship programme or maintenance loan subsidy, and the amount it has to pay to subsidise fee loans would be reduced.

Under this scheme, it would be up to the HEI itself to determine how it would deliver these courses at low cost. Many interesting and innovative forms of delivery may materialise. We might see the growth of more partnerships between universities and further education colleges, in which the college provides the first two years of study or foundation degrees and student then transfer to university to complete their degree. Or we might witness the expansion of places that are co-funded by employers, with local businesses and organisations pooling their resources through local enterprise partnerships to fund particular courses that meet their training needs. Alternatively, a university or college might deliver part of a course via distance learning through MOOCs, in order to keep costs down and deliver the course in a flexible way that suits student needs.
A further way of facilitating some focused expansion in higher education while containing costs to the public purse would be to reform the tax relief on employer-provided training. This consists of relief on employees’ training costs and foregone wages for corporation tax (for incorporated businesses) and income tax (for businesses run by the self-employed), plus self-employed people’s own training costs.

The government should reform training tax relief to better incentivise employers to invest in courses leading to accredited qualifications and continuing professional development, whether in further or higher education.

Landman Economics estimates that the cost of this tax relief was around £4.9 billion a year in 2010/11 (Reed 2011). Companies claiming tax relief for training currently do not have to specify the amount they spend on training – instead, they add training costs to general expenses. It is very likely that much of this relief is therefore not effectively targeted at high-quality training for individual workers.

In order to ensure that this tax relief is put to most effective use the following reforms should be considered:

• Corporation tax and income tax relief should be restricted to training that leads to an accredited qualification or continuing professional development (CPD). This would reduce the cost by 90 per cent, target resources at training that delivers increases in productivity, and help to drive greater employer investment in expanding further and higher education.

• With the money saved from that restriction a relief could be introduced on employer national insurance contributions (NICs) for employees undertaking training (see Reed 2011).

Strengthening vocational learning for ages 14–19

A policy of simply supplying more graduates on its own will not do. First, while there has been a growth in highly skilled work, there are still vast swathes of our labour market that are trapped in a low-wage, low-skill equilibrium. Around half of jobs in the UK currently do not require post-secondary education. In addition to providing more graduates we also need a strategy to raise the demand for higher-level skills, particularly in low-productivity sectors such as retail, hospitality, distribution, care and food processing, in order to avoid a situation in which more graduates are forced to take lower-skilled work (Keep and Mayhew 2004, Tamkin et al 2008, Lanning and Lawton 2012).

Second, our economy suffers from significant shortages of people with intermediate (level 3) technical skills. While the UK ranks 11th in the OECD for people with high skills (degree-level), it ranks 19th in terms of low skills and 21st for people with intermediate skills (Harbourne 2010). Shortages in associate professional and skilled trades occupations
account for around one-third of all skill shortage vacancies in the British economy – 21,000 such vacancies in all (Spilsbury and Garrett 2010). Demand is rising for such skills because of increasingly complex technology and the need to compete in higher-value-added markets, such as low-carbon sectors, advanced manufacturing, engineering construction, professional and financial services, the digital economy, and pharmaceuticals and life sciences.

Therefore, in addition to continuing to widen participation in higher education, as a country we need to strengthen vocational career pathways for people to gain qualifications from level 3 upwards. Crucially, the country needs to address significant shortages of intermediate technical (level 3) skills in key sectors such as manufacturing, engineering, motor vehicles, broadcasting, life sciences and pharmaceuticals (UKCES 2010). While it is not the place of this Commission to develop a holistic agenda for 14–19 vocational education, it is clear to us that such a strategy would need to include:

- An expansion in the provision of high-quality apprenticeships, which are longer, focus on school-leavers and combine on-the-job training with college-based broader study, including a proper grounding in English and maths (see Dolphin and Lanning 2011).

- A further expansion of dedicated 14–19 vocational programmes of study, particularly through further education colleges and university technical colleges, which enjoy strong links both to employers and universities.

- Reforms to the qualifications system that will provide clearer pathways for young people and send stronger signals to employers. The support of both government and opposition for a new technical baccalaureate provides a basis for a stronger system.

Higher vocational learning

The route from A-levels to higher education is very well defined and widely understood. However, the route from vocational and applied qualifications, including apprenticeships, into higher education is less clear – it is one that far fewer individuals follow. According to a recent BIS study, just 15 per cent of apprentices went on to higher education within seven years (Joslin and Smith 2013).

This lack of progression within the vocational track is problematic for three reasons. First, we know that the development and deployment of higher-level skills will be crucial to the UK’s economic prospects. It is important that workers with vocational qualifications have the ability to up-skill. Second, progression within the vocational track is vital for social mobility: vocational programmes are taken disproportionately by those from lower socioeconomic backgrounds, so a strong, institutionalised higher vocational route is vital for opening up opportunities. Third, the status and attractiveness of the vocational track generally will be raised if
it is no longer seen as the track for those who have ‘failed academically’. Ensuring effective transition routes from vocational pathways into higher education is critical to achieving this attitudinal change.

There is a crucial role here for higher-level qualifications (level 4 and above) provided through further education colleges (FECs). This includes full-time degree programmes, but it also encompasses professional qualifications, vocational qualifications (including NVQs), higher apprenticeships and other bespoke qualifications.

FECs are the ideal place for the provision of this kind of higher learning. They offer flexible modes of provision, such as part-time and modular courses, that better meet the needs of those who work and have family commitments than the traditional full-time honours degree. Importantly, they often offer accreditation of prior learning to make sure that learning is not duplicated. They have a focus on employment and maintain strong links to local employers, who feed into course design, ensuring the offer is relevant to those seeking to enhance their occupational skills.

There is clearly a significant appetite within the further education sector to provide more higher learning. Around half of the 20,000 low-cost places made available under the core and margin policy were successfully bid for by FECs. Indeed, there are a number of FECs that now specialise in the provision of higher education. Roughly one in 12 higher education students are taught in FECs, and 52 colleges between them taught half of all the HE students in the further education sector. Each of these colleges had over 1,000 higher education students, with over 4,000 at the largest providers.

The emergence of these colleges is down to a number of factors. They often emerge in ‘cold spots’ where there is a lack of a geographically accessible local HEI. They develop in partnership with sympathetic universities who see college-based provision as an important part of their mission to widen participation. They also emerge in large cities where the student market is large enough to sustain multiple institutions providing higher education.

Until now these colleges have worked in partnership with universities, who are responsible for awarding the degrees taught. However two colleges – Newcastle College and New College Durham – were in 2011 given the power to award their own foundation degrees. The Grimsby Institute and Blackburn College have also applied for this power. The Quality Assurance Agency has now set out guidance that would enable colleges to take on taught degree awarding powers (TDAP), meaning they could award their own BAs and BScs.

Large further education colleges providing higher education should be given the ability to award degrees and such colleges should be granted the renewed use of the title ‘polytechnic’.
Being able to award their own degrees would be beneficial for these colleges, because it would enhance their institutional autonomy (they would no longer be dependent on the goodwill of a university partner), they would be able to design and approve new courses more quickly to meet local employment needs, and they would be able to invest more money in the learner (whereas they currently have to pay validation fees of between £750 and £1,000 per student).

We believe that there is a strong case for more large FECs that specialise in higher vocational learning being given the power to award their own degrees, subject to the criteria set out by the Quality Assurance Agency and approval by the Privy Council.

However, we also believe there is a case for going further: those colleges gaining TDAP should also be given the title of ‘polytechnic’. There are two reasons for this. First, polytechnic status would carve out a distinctive place in our tertiary education system for institutions that focus on providing higher-level vocational qualifications. While many universities also provide such qualifications, a differentiated title would protect a distinctive role for higher vocational learning that was arguably lost with the end of the binary system. Second, polytechnic status would be a mark of vocational excellence, sending out wider signals about the importance of vocational learning. It would declare that the university title and the university route are not the only form of high status in our system.

**Demand for skills**

A strategy for equipping our population with higher-level skills must be accompanied by reforms to the labour market that increase the demand for such skills from employers. Firms providing little training often operate in low-value product markets, competing on cost and price rather than quality and professional competence. Jobs tend to be narrowly task-focused, repetitive and low-paid, raising concerns about job quality, in-work poverty and limited social mobility. Such jobs are prevalent in sectors such as retail, hospitality, storage and distribution, food processing firms and social care (Lanning and Lawton 2012).

In addition to the changes to tax relief on training set out above, to improve investment by employers in training and to raise their demand for higher-level skills, a number of further measures should be taken:

- **Group training arrangements** should be put in place, as in Australia, to enable small and medium-sized enterprises to access training and business advice on addressing organisational problems and improving training, competition strategies, work organisation and job design.

- **Sector skills councils** should be less government-controlled and owned much more by employers and unions. Within their sector, they ought to be responsible for developing the broad frameworks of vocational qualifications and have the power to determine licences to practise.
• Local skills partnerships should bring together employers, unions, professional bodies and FECs to design the content of vocational education and training to suit local circumstances, develop and conduct procedures for assessment of learners, and regulate the quality of training for young people and where licences to practise are in place (see Lanning and Lawton 2012). This could be coordinated by local enterprise partnerships.

3.2 Universities as an export industry

In the last chapter we argued that higher education is increasingly an international sector and one in which England enjoys a comparative advantage. The UK is the second most popular destination in the world for international students, in terms of the absolute number of students it attracts from overseas (Cavanagh and Glennie 2012).

The benefits of attracting international students to English universities and colleges are numerous. International students enhance the culture of our institutions and give UK students the opportunity to live, work and build networks with other young people from a diverse range of countries and cultures.

International students are also a source of valuable income for English HEIs, particularly because institutions are allowed to charge significantly higher tuition fees to international students coming from outside the EU. Figure 3.3 shows income from non-EU fees as a percentage of total income by institution in 2010/11. Notably one institution received nearly half of its income from non-EU fees in 2010/11, and nine other institutions received more than 20 per cent of their total income from non-EU fees.

![Figure 3.3](Source: HESA 2012a)
But perhaps most importantly, international students bring revenues to the wider economy. The export earnings of higher education, including tuition fees and spending by non-UK students, have been estimated at £7.9 billion for 2009, and according to University UK’s estimates the sector could see a potential growth to £16.9 billion by 2025 (UUK 2012a: 12).

However, it is an export industry under threat. New visa rules (and associated political rhetoric) risk damaging our standing as one of the world’s most popular destinations for international students. The government includes overseas students in its net migration target, which aims to significantly reduce net migration to the UK by the time of the 2015 general election. In order to make progress towards this target, the government has sought to substantially reduce the number of international students coming to the UK. Among other changes, the government has implemented tougher regulations on employment during and after study, more stringent English-language requirements, restrictions on students bringing dependants to the UK, and a much tougher sponsorship regime for universities and other education institutions.

These changes led to a 10 per cent fall in the number of study visas issued between March 2012 and March 2013, and the number issued is down roughly 30 per cent from its peak. Most of this fall hit further education colleges and English language colleges (which saw sponsored visa numbers drop by 46 per cent), while the number of sponsored visas issued via HEIs actually rose by 5 per cent (ONS 2013). However, this has effectively halted a period of sustained growth in international students in the higher education sector (particularly given that some of those now counted as ‘HE’ under new university sponsorship arrangements would not previously have counted as such) and, given the pace of growth in the global market, will lead to a loss of market share for the UK. In higher education specifically, there has been a particularly sharp fall in the number of students from India and Pakistan, with a drop of 24 per cent and 13 per cent respectively between 2010/11 and 2011/12 (HESA 2013c). Although the number of Chinese students in the UK is still rising, a recent report by Able and White (2012) found a growing trend among Chinese students to aspire to enter top American schools and universities rather than British ones. The report quotes a survey of 428 Chinese secondary school pupils and their parents in which 40 per cent of respondents said they would be less likely to consider a UK university if it became harder to work in the UK after graduating.

It does not make sense to include international students within the net migration target, simply because these students are largely in the UK for only a short time. Home Office research shows that only 1 per cent of those who entered the UK on student visas in 2006 had achieved permanent settlement five years later, with an additional 17 per cent having ongoing leave to remain (Home Office 2013).
It is notable that our leading competitors in the international student market (Australia, the US and Canada) do not include international students in their calculations of net migration for the simple reason that these students are overwhelmingly transitory (Cavanagh and Glennie 2012). It is also notable that, having previously tightened up on post-study work, Australia, the US and Canada have now liberalised their systems again for fear of losing out in the global student market.

**International students should be removed from the government’s net migration target and student visa rules should be reviewed, including those concerning post-study work, to ensure that the UK’s higher education sector can compete on a global stage.**

Beyond this, the government should stop making constant changes to the system for overseas students, because the uncertainty and insecurity this generates is damaging to the UK’s reputation.

### 3.3 Research and innovation

Britain needs a strong science, research and innovation base if it is to achieve an effective and sustainable rebalancing of the economy. Our higher education sector provides us with an exceptionally strong foundation upon which to build: our universities rank second only to those of the United States in terms of the quality of their research.

In order to boost the future productive capacity of our economy we need to sustain our investment in science and research throughout the next parliament. However, we also need to implement reforms so that the link between research in our universities and innovation in our industries is strengthened.

**The role of research, science and innovation in economic rebalancing**

Our research, science and innovation base is critical to the task of rebalancing the economy and setting Britain on a sustainable path to growth. The 2007 Sainsbury review of the UK’s science and innovation system concluded that in a more competitive world the only way for Britain to combine economic growth with rising living standards for the majority of the population is to move into high-value goods, services and industries. Company strategies based on low-cost, low-price competition will lead to a downward spiral, with each year bringing new low-cost competitors. Taking the ‘high road’ means that businesses will need to shift into knowledge-intensive goods and services and out of low-value ones. What Sainsbury described as the country’s ‘innovation ecosystem’ is central to this task (Sainsbury Review 2007).

Publicly funded research is at the heart of that innovation system (see Janeway 2012). Innovations that have transformed market economies, from the railways to the internet, have required huge investments in technologies whose value could not be imagined or guaranteed at the
outset. Innovation requires experimentation and the space to fail, often repeatedly, which entails that funding needs to be uncoupled from a concern with immediate economic return. The innovation rate in the economy depends critically on public institutions and funding – and especially on our universities.

**Sustaining world-class research**

There is little doubt that English universities are world-leading when it comes to the quality of their academic research and the reputation of their institutions. The *Times Higher Education* World University Rankings for 2012–13 place three English universities in the top 10 and six in the top 50 – only the US has more universities in the top 50 than England (THE 2013).

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<tr>
<th>Rank</th>
<th>Country</th>
<th>HEIs in the top 50</th>
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<tbody>
<tr>
<td>1</td>
<td>United States</td>
<td>28</td>
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<tr>
<td>2</td>
<td>United Kingdom</td>
<td>7</td>
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<tr>
<td>3</td>
<td>Australia</td>
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<td>4</td>
<td>Canada</td>
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<td>Japan</td>
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<td>7</td>
<td>Germany</td>
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<td>8</td>
<td>Hong Kong</td>
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<td>9</td>
<td>Republic of Korea</td>
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<td>10</td>
<td>Russian Federation</td>
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<td>Singapore</td>
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<tr>
<td>12</td>
<td>Switzerland</td>
<td>1</td>
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Source: THE 2013
Note: One Scottish university (Edinburgh University) is among the top 50 UK institutions; the rest are English.

England also scores very highly in terms of its academics’ citation count in peer-reviewed journals, ranking third in terms of the total number of citations that its academics achieved in overlapping five-year periods between 2001 and 2011 in Thomson Reuters indexed journals (absolute figures).

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<th>Rank</th>
<th>Country</th>
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<td>1</td>
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<td>48,862,100</td>
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<td>2</td>
<td>Germany</td>
<td>10,518,133</td>
</tr>
<tr>
<td>3</td>
<td>England</td>
<td>10,508,202</td>
</tr>
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<td>4</td>
<td>Japan</td>
<td>8,084,145</td>
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<tr>
<td>5</td>
<td>France</td>
<td>7,007,693</td>
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Source: Thomson Reuters 2011
Note: For articles with multiple authors representing different countries, each listed country receives a full, not fractional, citation credit for the given paper.

This success is even more remarkable when it is noted that the UK has low levels of public expenditure on R&D compared to other countries, both
when it comes to the government’s expenditure on R&D as a proportion of GDP (0.57 per cent) and as a proportion of total budget expenditure (1.22 per cent). Moreover, while government-financed GERD has increased (and decreased) in the last decade, public expenditure on R&D as a percentage of total budget expenditure has seen a downward trend.

**Figure 3.4**
Government-financed gross domestic R&D as a percentage of GDP, selected countries, 1995–2011

**Figure 3.5**
Total government budget appropriations or outlays for R&D (GBAORD) as a percentage of total government expenditure, selected countries, 2004–2011
A recent Universitas 21 study of the performance of different countries’ higher education systems found that the UK ranked second to the US in terms of output (articles published, other metrics of research excellence, participation rates, number of researchers per head, and graduate employment rates) but came 27th (behind the Ukraine and Iran) when it came to resources invested. The report noted that: ‘The United Kingdom ranks low (below the median) on resources but is second on output, indicating high productivity’ (Williams et al 2012).

It is because of the enormous contribution of higher education research to our economy and the comparatively low level of public spending on it that we should continue to ring-fence and sustain in cash terms the science and research budget over the next spending review period to 2017/18. Because this implies a continued real-terms decline in funding, we argue that once the structural deficit in the public finances has been eradicated we should commit to a 10-year strategy of raising public investment in research each year above inflation. If the science and research budget were to rise by 1 per cent above inflation each year over that period this would see the budget grow from £4.6 billion a year in 2017/18 to £6 billion a year by 2027/28 (or £4.7 billion in 2013/14 prices; see chapter 6).

Improving the distribution of research funding
There has long been a debate about how to distribute research funding so as to best protect our world-class reputation. Since the introduction of the Research Selectivity Exercise in 1986 there has been an increase in selectivity: in other words, the core research funding from HEFCE has increasingly gone to those departments rated high on quality. This rise in selectivity has been correlated with a growing concentration of funds in a smaller number of universities.

For example, in 2012–13, HEFCE will allocate more than one-third (35.5 per cent) of the total quality-related research (QR) funding to just five institutions (Oxford, Cambridge, UCL, Imperial and Manchester), and 10 institutions will go away with more than half (51.3 per cent) of the total budget. Some 75 per cent of the budget will be allocated to just 23 institutions, leaving more than 90 institutions to share the remaining 25 per cent (HEFCE 2013a).

There is a justification for this. The introduction of selectivity has helped to sustain our reputation for world-class research (Adams and Gurney 2010). The excellent performance of the UK in research is driven in very large part by the performance of a small number of institutions (especially those in the so-called ‘golden triangle’ of Oxford, Cambridge, Imperial, the London School of Economics and University College London). These institutions do not just produce a much higher proportion of the country’s research outputs – their research outputs also tend to be significantly above average when it comes to global impact measures (number of citations).
Nevertheless, it is important to note that while selectivity can clearly be justified based on fair and rigorous assessment of quality, we should be very cautious about elevating ‘concentration’ to a principle for the distribution of funding. There is a lot of below-average research done in research-intensive institutions, just as there is excellent world-class research happening elsewhere. The country benefits most from a selective and competitive funding system that gives other institutions outside the leading few the opportunity to compete for funding and provide a healthy challenge.

**To sustain our reputation for world-class research, the dual-support system and the principle of selectivity in the allocation of core research funding should be retained.**

While the principle of selectivity is clearly justified as a way of retaining our world-class status, we should not forget the (unintended) impact it has on the regional distribution of research funding. Figure 3.6 shows that by far the greatest concentration of research funding can be found in London and the South East.

![Figure 3.6](image-url)

Figure 3.6: Research income to English universities, by region of institution and source of income, 2010/11 (£ ’000s)

Because of the important role that research activity plays in economic regeneration, there is a danger that our current research funding system will reinforce rather than challenge existing regional economic
imbalances. We believe that we need to think strategically about how we can combine a policy of selectivity for basic research funding that rewards and sustains excellence with a new approach, outlined below, to funding for university and business collaboration intended to benefit the most economically disadvantaged regions of England.

**Boosting commercial innovation**
While England’s university research is renowned for its excellence, we are less effective at deploying that innovative knowledge to create new commercial products and processes.

There are a number of indicators of this:

- The UK ranks well behind most key competitors on the amount that industry invests in R&D activities, as shown in figure 3.7.
- The UK performs below the EU-27 average in terms of Patent Cooperation Treaty patent applications, with 3.27 such applications per billion GDP in 2011. According to the European Commission’s ‘Innovation Union Scoreboard’, the top countries are considerably ahead of us: Sweden (9.03), Finland (9.03), Switzerland (8.18), Denmark (7.5) and Germany (7.04) (EC 2012).
- Between 2008 and 2010, only 44 per cent of UK businesses undertook some form of innovation activity – whether product or process-based – compared to a reported 79 per cent of German firms and 54 per cent of French firms (Eurostat 2013b).
The Innovation Union Scoreboard for 2011 showed that UK companies acquired just 7.31 per cent of their turnover from sales of new innovations. By comparison, German and French companies acquired 17.38 per cent and 13.25 per cent of their turnover from such sales, respectively (EC 2012).

Only 25.1 per cent of small and medium-sized enterprises (SMEs) in the UK had introduced a product or placement innovation, whereas 32.1 per cent of French SMEs and 53.6 per cent of German SMEs had produced these innovations (EC 2012).

The UK scores poorly on the amount of funding that businesses devote to R&D at universities (Hughes and Mina 2012). Lying behind these figures is evidence of a weak perception among businesses of the value of universities as innovation partners. Of the innovation-active companies responding to the UK Innovation Survey, only 1.9 per cent described universities as highly important sources of information, leaving universities as the least popular option on a list of possible sources of information (BIS 2012).

In order to address these weaknesses, governments of all colours have been attempting to improve university–business collaboration in recent years. Most recently the chancellor announced in the 2013 budget the Witty review into how higher education can help boost regional economic growth. This follows similar reviews, such as the Lambert review (reported 2003) and the Wilson review (2012), which have led to much greater activity and more funding in this area, as well as the creation of the National Centre for Universities and Business.

In 2001, HEFCE established Higher Education Innovation Fund (HEIF) to support and develop a broad range of knowledge-based interactions between HEIs and the wider world which ‘result in economic and social benefits to the UK’. This is currently worth £150 million a year. Also, the UK Research Partnership Investment Fund has invested £300 million in the last year in joint projects with industry and the charitable sector.

The Technology Strategy Board (TSB) is an executive non-departmental public body established by the government in 2007 and sponsored by BIS. The board’s role is to stimulate technology-enabled innovation in areas with a high potential for growth. They do this by promoting, supporting and investing in technology research, development and commercialisation.

**Applied research institutes**

Probably the most ambitious programme run by the TSB is the Catapult programme, which encompasses seven ‘Catapult centres’ that have the stated purpose of addressing market needs in key areas and securing the UK’s competitiveness in future markets (TSB 2011: 4). The TSB’s

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5 Placement innovation refers to new methods in placement, marketing or sales, such as franchising, distribution licences, new concepts for product presentation and so on.
goal is for the centres to provide better resources to businesses in the long term and to give them access to technical expertise, infrastructure, skills and equipment in one place. The hope is that this will give way to an innovative and entrepreneurial environment that facilitates a variety of routes to the commercialisation of new products, processes and services (ibid: 5).

**Catapult centres**
The centres will receive £200 million over the current spending review period, which means core funding of around £10 million a year for each centre. Over time, TSB expects the centres to match this with £10 million a year in industrial income and £10 million a year in collaborative research and development income.

The seven Catapults have been established in seven areas:
- High Value Manufacturing (encompassing seven existing research centres in different areas of high-value manufacturing; no single location)
- Cell Therapy (London)
- Satellite Applications (Harwell Innovation Centre, Oxford)
- Offshore Renewable Energy (main site in Glasgow, with a second site in Northumberland)
- Connected Digital Economy (London)
- Future Cities (London; key demonstrator project in Glasgow)
- Transport Systems (location to be decided)

A number of these Catapults are still in the process of being fully established, but the plan is to have them all up and running by the end of 2013.

Other leading economies have established specific research units to facilitate academia–industry collaboration, which is supported by established thinking on how such collaboration works. Universities are organised around academic disciplines, which is very different to how applied knowledge works in the real world (Weiler 2007). This underlines the need for professional schools or research institutes that combine interdisciplinarity and an orientation towards applied knowledge in fields such as public health, environmental protection, human settlements and transportation, and education (ibid).

The two case studies below show how networks of applied research institutes are organised in Japan and Germany. The UK’s nascent Catapult programme shares many of the same objectives, but there is a significant difference in resourcing: overall, the German and Japanese networks have budgets of approximately £1.6 billion and £515 million respectively.
Of these totals, in both countries, we calculate that the state is investing around £400 million a year in each case. By contrast, our network of Catapult centres has to get by on an overall budget of £200 million spread over four years; there is very little private funding, as the centres are in a developmental stage. If we are to transform the capacity of our firms to innovate, we will need to provide a transformational financial uplift for this work.

### Japan: National Institute of Advanced Industrial Science and Technology

Japan’s national applied research network – the National Institute of Advanced Industrial Science and Technology (AIST) – was established in 1952, but its institutional roots date all the way back to 1882, when the Geological Survey of Japan was established. The network’s total income in 2012 was ¥79.7 billion (approximately £515 million), of which around 75 per cent is governmental subsidy, 14 per cent is income from commissioned research, and 11 per cent comes from other sources.

AIST has two headquarters – one in the science city Tsukuba (near Tokyo) and the other in Tokyo itself. However, although a lot of activity is concentrated around the capital, AIST has also implemented a regional dimension to its research activities. It has eight regional research bases throughout Japan, which have their own priority research field and administer their own research units. Most research bases have been established to align with the industrial structure or technological needs of the local region.

As well as having a regional dimension, each of the different research units also collaborates with national administrative planning offices relevant to their field: environment and energy; life science and biotechnology; information, technology and electronics; nanotechnology, materials and manufacturing; metrology and measurement science; and geographical survey and applied geoscience. These offices coordinate research strategies across regional borders and facilitate collaboration between different units.

The main purpose of AIST is to deliver applied research that offers practical benefits and seeks to stimulate new industries and new types of basic research. Importantly, AIST seeks to develop new research units according to pressing national and global needs and trends.

Source: AIST 2012
Germany: The Fraunhofer-Gesellschaft
The Fraunhofer-Gesellschaft was established in 1949, in the same year as the Federal Republic of Germany. It was set up as a non-profit organisation that distributed grants and donations for research of direct relevance to industry, and started out as a small office with just three employees. Since then it has developed significantly in size and influence, and today it is the largest organisation for applied research in Europe, and a vital element of Germany’s industrial and scientific landscape.

The Fraunhofer-Gesellschaft undertakes applied research of direct utility to industry, the service sector and public administration. Its strategy is to facilitate research that has a benefit to wider society and is geared towards meeting the needs of the human population in areas such as health, security, communication, and energy and the environment.

The Fraunhofer-Gesellschaft has an annual research budget of €1.9 billion (approximately £1.6 billion). It receives about 30 per cent of its funding from the German federal and Länder governments, in the form of basic research funding, and about 70 per cent through contract research earnings from industry or via competitive research funding programmes.

The organisation incorporates more than 80 research units, including 60 Fraunhofer Institutes at different locations in Germany. The research institutes employ more than 20,000 staff, most of whom are qualified scientists and engineers. Institutes that focus on related subject areas cooperate in so-called ‘Fraunhofer groups’ and foster a joint presence on the R&D market. The established group areas are: information and communication technology; light and surfaces; life sciences; microelectronics; production; defence and security; and materials and components. The institutes are spread out regionally and play an important role in their local and regional economies, as well as in the national economy. In recent years, Germany has sought to strengthen the regional dimension of the Fraunhofer-Gesellschaft by developing so-called Fraunhofer ‘innovation clusters’ across the country, to promote regional development and a balanced economy.

The contract research that takes place at the Fraunhofer Institutes is done in close collaboration with the companies providing the funding and seeks to develop practical solutions to issues specified by the contracting company. The basic research, on the other hand, focuses on technological fields which hold
high promise for the future and pave the way for entry into new markets. This type of research is normally funded by the German federal ministry of education and research. In addition to conducting applied and basic research, the institutes also help companies with the commercialisation process (for example, by conducting prototype manufacturing, trials of new technologies, feasibility studies, market surveys, or pre-investment analysis reports). The institutes also provide companies and researchers with advice on funding sources, and help entrepreneurs and researchers to initiate ‘spin-outs’ by connecting them with venture capital.

The Fraunhofer-Gesellschaft’s total business volume has increased steadily in the past few years, from €1.4 billion in 2008 to €1.9 billion in 2012. During this period, the total revenues that the Fraunhofer-Gesellschaft acquired from contract research also increased progressively, from €859 million in 2008 to €1.1 billion in 2012.

Source: Fraunhofer 2013

Establishing a new network of Applied Research and Innovation Centres

We should reallocate approximately £1 billion a year that is mainly spent inefficiently on R&D tax incentives to set up a national network of Applied Research and Innovation Centres focused on boosting applied research in the strategic industries of the future and on revitalising regions with below-average growth.

The overall aim of the Applied Research and Innovation Centres (ARICs) should be to bridge the gap between research findings and outputs and their development into commercial propositions. More specifically, these centres will:

• enable businesses to share R&D costs, access skilled researchers and utilise expensive equipment which would otherwise be out of reach, reducing risk and shortening time to market
• provide greater critical mass in research expertise and business capability, exploiting knowledge across value chains by co-locating multiple players in a physical hub, encouraging interaction
• strategically focus R&D investment in the development of new technologies in areas where global markets are expanding and where the UK has excellent research and business capability
• leverage private-sector investment alongside public investment, to help raise business investment in R&D.
These are broadly the objectives of the new Catapult centres – we propose to retain and expand these existing centres and to develop new ones through a significant uplift in resource.

**Funding the ARICs**

Increased funding should be provided with the intention that it will decrease as the centres attract research funding on their own from private, public and third-sector sources, as well as income from intellectual property. However, it is estimated that they will need at least three to five years of substantial government funding to reach this stage.

We estimate that by reallocating existing funding we could increase the funding available to these centres from £50 million a year to around £1 billion a year.

**The patent box**

The ‘patent box’ was introduced from April 2013. This policy reduces the rate of corporation tax on the income derived from patents to 10 per cent, with the aim of incentivising firms to engage in research and development activity. The measure has been welcomed by many firms, but researchers from Manchester University and the Institute for Fiscal Studies argue that it is an inefficient way of incentivising high-tech R&D (Griffith et al 2011). There are a number of reasons for this:

- The largest share of the tax savings will accrue to a small number of firms that account for the majority of patents and are likely to generate large associated revenue streams.
- The policy is poorly targeted at research because it targets the income which results from patented technology, not the research itself. Once a patent is in place, a firm has a monopoly on the use of those ideas, and so can capture all of the returns. They already have an incentive to do this. It is likely to reduce the tax rate for activity that would have occurred even in the absence of government intervention, so there is a large deadweight cost.
- The policy adds complexity to the tax system because it requires policing to ensure that both income and costs are being appropriately assigned to patents.
- It is not clear that any additional research resulting from the patent box policy will take place in the UK. Under European law, eligibility criteria for inclusion in the patent box could not include restrictions that patentable technologies must be created in the UK. It would, therefore, be possible to hold patent income in the UK without locating any associated real activity here.

A better way of encouraging high-tech R&D would be to increase investment directly in applied research through the ARICs.

In the June 2010 budget it was estimated that the patent box would cost £1.1 billion per year. If the corporation tax cut were halved by
setting a 15 per cent rate of corporation tax on profits generated from patents then this would save around £550 million a year, which could be allocated to the new centres.

**R&D tax credits**

Tax credits are used by governments as a policy tool to increase business investment in R&D and recognise that R&D activities within businesses have spillover effects that should be encouraged (Köhler et al 2012).

The UK’s R&D tax incentive started out as a SME-oriented tax credit in 2000/01, but it has since expanded to include large businesses as well. The exact amount of tax credit that companies can claim depends on their size. Currently, SMEs are able to claim 225 per cent of their qualifying R&D expenditure as a deduction from taxable profit – that is, they have £225 taken off their total corporation tax for every £100 spent on R&D. For large businesses, the tax credit rate is 130 per cent.

The chancellor has recently reformed the scheme to allow companies claiming R&D tax relief under the ‘large company scheme’ to be entitled to payable cash credits equal to 10 per cent of qualifying expenditure. The new R&D expenditure credit is being introduced alongside the existing super-deduction scheme. Companies have a three-year period in which to elect into the new credit scheme; after this, the old super-deduction scheme will disappear from April 2016. There are concerns that R&D tax credits are not sufficiently targeted at those areas where the country needs to raise its research and innovation rate if the economy is to rebalanced. It is worth noting that £400 million a year in R&D tax credits goes to the business services sector, much of which goes to large City firms.

We therefore recommend that the R&D expenditure credit for large companies be reduced from 10 per cent to 8 per cent. We estimate that this would save £100 million, which could be invested directly in strategically important R&D through the ARICs.

**Spectrum fees**

The 4G spectrum auction triggered a review by Ofcom of the annual licence fees paid by the UK’s mobile operators for the spectrum they currently use to provide mobile services. Fees for the 900 MHz and 1800 MHz frequencies at present total £64.5 million per annum. Revising the annual licence fees in line with the market value of spectrum as directed by the Coalition government in December 2010 would increase the amount paid annually to £280–£311 million per year, providing almost a quarter of a billion pounds in additional revenue per annum. This figure has been calculated based on the value realised from the 4G spectrum auction, which raised just £2.3 billion (see Thomas 2013).
In total, we calculate that these measures would raise around £945 million, which combined with the existing budget for the Catapults (£50 million per annum) would take our national investment in this network to just under £1 billion per annum. As noted already, this funding would be reduced over time as private-sector project funding comes forward.

**Directing the focus of the ARICs**
In addition to new resourcing for ARICs, we also propose a shift in focus from that of the existing Catapult centres.

**SMEs**
The new centres need to develop an innovation environment and financial structures that serve to de-risk the innovation process and provide hubs for businesses, particularly SMEs, to engage in R&D. This would help to overcome the main barriers that hinder SMEs from engaging in innovation: lack of finance, high perceived economic risk, and the direct cost of innovation. The fact that businesses are unlikely to consider universities as highly important sources of information relevant to innovation also means that there is a need for better understanding among businesses of the usefulness of working with HEIs.

We recommend that the ARICs have as an explicit goal to reach out to and work with SMEs. This should be reflected in performance indicators: for instance, Andersen and Le Blanc (2013) suggest that such centres should aim to get at least 50 per cent of their commercial revenues from SMEs.

**Applied and basic research**
Applied research centres across Europe vary in the type of innovation activity that they engage in: whereas the Danish and Swedish centres focus mainly on close-to-market innovation, the German Fraunhofer centres conduct a great deal of technology-oriented basic research intended for future application, in addition to close-to-market innovation activity (ibid).

Currently, the main focus of the Catapults is on close-to-market innovations. This focus is justified on grounds of this being an area where the UK economy lags behind competitors (for example, as previously described, in patent applications and sale of innovations as percentage of company turnover).

We agree that the main focus of the centres should be on close-to-market research. However, there is a risk that a geographical and intellectual gap between applied research at the ARICs and basic research at universities could create a detachment and a lack of communication between the most innovative segments of the private sector and the cutting-edge of the research base.
To avoid this, ARICs should:

- create and maintain extensive directories of top researchers working on basic research in their respective fields, as well as the companies working on issues of potential relevance to basic research
- provide a location for experts working on innovations at different levels of technological readiness to come together to discuss the bigger picture and strategic direction of their field, and to learn about one another’s specific activities and work
- in collaboration with universities, run a small number of expansive basic research projects at each centre that address a long-term future need integral to that centre’s focus. This would ensure that long-term future vision is an essential part of a centre’s work, alongside the commercial aspect.

The regional dimension

The Catapult programme currently has too little emphasis on engaging local economies. This is the case both for the Catapult programme as a national strategic programme and for each of the individual centres, which have business plans that do not contain any reference to local economic purposes.

Britain’s industrial strategy must be concerned not only with increasing growth in aggregate, but also with ensuring that growth is distributed in a way that benefits all parts of the country. Therefore, a regional focus should be an integral part of the ARIC programme. This requires that decision-making processes on where to locate future ARICs should be informed by an explicit focus on promoting growth in lagging economic regions. Although these regions have generally weak economic growth, many of them have both historic and existing strengths in particular fields, for example aerospace in the North West and engineering in the North East. The ARIC programme could help to provide an innovation platform for businesses in these regions.

An explicit concern with regional rebalancing also needs to be built into the mission of each of the existing centres, which should be tasked with leading economic regeneration in their own locality, as well as setting up strong networks with relevant businesses and universities in lagging economic regions.

Low-productivity sectors

The ARIC programme should not simply be focused on supporting innovation at the high-tech end of the economy. It should also play a role in helping us to raise the demand for higher-level skills, as discussed earlier in this report. As well as generating highly skilled jobs we need to support the growth of middle-income jobs and raise the quality of low-income jobs. According to the Commission on Living Standards, the UK has the second highest level of low pay among advanced economies.
(behind the US) and it stands out for the nature and quality of its low-wage work: ‘more than one in five UK employees earn less than two-thirds of median hourly pay, compared to fewer than one in 10 (8 per cent) in Denmark’ (CLS 2012: 48).

There are several reasons for this, including the lack of skills strategies, training opportunities and progression frameworks in low-wage sectors. There is also a general tendency for these sectors to compete on cost rather than quality, and thus engage in a ‘race to the bottom’. Indeed, many jobs that are regarded as low-skilled in the UK require a higher level of skills in the Netherlands and Denmark. Firms in these countries provide more training because they compete on quality, not on production at the lowest cost (Dolphin 2013). The result is a much more highly trained and skilled workforce than exists in the UK, and more innovation activity among SMEs seeking to improve the quality of their products and processes.

Therefore, in order to really rebalance the economy, we must develop those sectors that are low productivity and use low skills. This involves encouraging firms in these sectors to increase their demand for skills and improve their innovation activity. This is particularly challenging in areas such as retailing, hospitality and distribution and storage – sectors which have come to rely heavily on low-skilled staff on low wages to keep production costs down (ibid).

Applied research can play a crucial role in helping these ‘mundane’ sectors to compete more on quality than cost, and in raising their demand for mid and high-level skills. For instance, food and agricultural science can help to improve the quality of their products, while applied economics can help to improve their supply chains. This latter objective is seen as a key factor in raising productivity and job quality in the British pig meat sector and other, similar declining British sectors (Bowman et al 2012).

3.4 Conclusion
We have argued that higher education is a vital strategic asset as we face the task of rebuilding and rebalancing our economy. As our economy continues to shift into more knowledge-intensive sectors, higher education will play a critical role in providing people with the higher-level skills required. We argue that overall levels of participation in higher education, now at record highs, need to be sustained throughout the next parliament.

Alongside this, the country needs a stronger vocational education and training system to address a chronic shortage of intermediate technical skills and to provide those with vocational qualifications with a route into higher learning. We argue that there are a number of large further education colleges specialising in higher vocational education that should be able to award degrees and take the title of polytechnic.
On the flipside, policies to improve our skills base must also be accompanied by economic reforms that encourage businesses to utilise the higher-level skills supplied by our education system.

To support higher education’s capacity to generate export revenues for the country, the government should remove international students from its net migration target and ensure our post-study work arrangements are internationally competitive.

University research and the innovation it triggers are vital links in the chain of economic growth. We argue that the country must continue to ring-fence and protect the research budget throughout the next parliament. In addition to protecting funding for pure research, we also argue for a major uplift in our public investment in applied research to support businesses in the development of new products and processes. This is why we need to build on the existing Catapult centres and invest around £1 billion in a powerful network of Applied Research and Innovation Centres.

The civic role of higher education

While this chapter has focused on the role that higher education can play in national economic renewal, many of England’s universities were created in the 19th century to meet the needs of their local communities. They were established by local industrialists and civic leaders to enhance the economic, cultural and social life of their immediate regions. Today, HEIs still play a tremendously important role in their localities, acting as a hub for regional economic growth, a major employer, a support for local businesses, a source of volunteers, a provider of services, and a physical institution offering many cultural and social activities.

This mission is likely to become more important over the coming years, as policy changes affect the environment in which HEIs operate. In England, the institutions of local economic development have changed, with the demise of regional development agencies and their replacement with more diffuse local enterprise partnerships. Large funding cuts to local authorities are also changing the local landscape, with the closure of libraries, arts centres and sports centres coming on top of cuts to more essential services.

This presents an opportunity for HEIs, which can act as anchors for their local economies and communities – filling the void that has been created by the withdrawal or shrinking of other key institutions. Universities and colleges will need to weave their civic mission across their core functions of teaching.
and research, rather than seeing it simply as an added extra (Goddard and Vallance 2013), and there are a number of examples of how this can be done effectively.

First, HEIs can use their considerable research and development capacity to help address social and economic problems in their cities and regions. While a lot of academic research seeks to address national or global challenges – such as climate change, poverty, health, ageing, business innovation and social cohesion – these invariably affect local communities in specific ways. This gives academics the chance to use their cities as sites for research and as testing grounds for possible solutions.

Second, HEIs can help to drive and shape economic growth in their regions, replacing some of the functions previously carried out by the regional development agencies. Universities and colleges can be instrumental in building networks between local businesses, and collaborating with them to innovate and improve the products and services they offer. This is the approach taken by the University of Kent, whose Business Improvement and Growth (BIG) programme provides research-led support and training to local SMEs. Higher education institutions can play integral roles in their local enterprise partnerships, bringing together different economic actors and positioning themselves as the main source of local economic intelligence (Schmuecker and Cook 2012).

Third, universities and colleges can play an active role in the governance of local institutions and public services. There is a long history of universities supporting teaching and research in the NHS, for example, but the devolution of other public services is opening up more potential for this sort of activity. A number of universities, including UCL and Exeter, are sponsoring academy schools and university technical colleges, which enables them to contribute both their expertise and facilities to the school system.

In short, there is plenty of scope for universities to become integral to the public services in their towns and cities.
4. EXPANDING OPPORTUNITY, STRENGTHENING SOCIAL JUSTICE

4.1 The challenge
How higher education can expand opportunity
Higher education can help to expand opportunity in a number of ways. First, it can promote social mobility for the individual by opening up access to careers and social networks that they can draw on throughout the rest of their lives. Second, it can help to shape the wider economy, providing skills that are necessary for growth and prosperity that can be shared by all. Third, higher education trains those who go on to hold elite positions and it can ensure that those elites are more representative of the society around them.

English higher education has a proud history of helping to expand opportunity. This can be seen as far back as 1823, when George Birkbeck founded London’s first Mechanics’ Institution, later to become Birkbeck University, dedicated to the part-time education of working people. It was also seen in the creation of the northern civic universities, such as Sheffield, Leeds and Liverpool, which were founded on the aspirations and donations of local people, who wanted a university that would benefit their industries and communities.

In the post-war period, the creation of the so-called ‘plate-glass’ universities opened up university education to aspirant middle-class families, and it was on these liberal campuses that many struggles against racism and sexism were forged. Meanwhile, the creation of polytechnics under Tony Crosland in the late 1960s expanded tertiary education for much of the working population. Then, the Open University harnessed the power of new technology – television – to deliver mass higher education directly into people’s homes.

How higher education can reinforce divisions in society
While education has the potential to expand opportunity in society, it also has the potential to reproduce existing patterns of privilege and disadvantage. The links between poverty and lower academic achievement are well documented. Children from disadvantaged homes are more likely to start school behind their wealthier peers, and this gap widens over the course of their school career. Last year, 36 per cent of children who were eligible for free school meals achieved five good GCSEs, compared to 63 per cent of children from more well-off households. As a result, they are far less likely to go on to take A-levels or apply for higher education. Only one-fifth of the lowest achievers at
age 16 go on to acquire any sort of further education or training, while the majority of those with good school results go on to sixth form or college (Cassen and Kingdon 2007).

Even among those students who do succeed at school and sixth form, there are more subtle patterns of disadvantage. Many young people are simply not doing the kinds of courses that will enable them to gain access to other highly selective courses and institutions. For example, 83 per cent of pupils in selective schools will study for a GCSE in triple science – biology, chemistry and physics – compared with just 31 per cent in comprehensives (Greevy et al 2012: 17).

Higher education institutions tend to rely on school results to determine their admissions, and as a result these inequalities in school attainment are reflected in the composition of our universities and colleges. Analysis of participation rates shows that fewer than one in five young people from the most disadvantaged neighbourhoods participate in higher education, compared to well over half of young people in more well-off neighbourhoods (HEFCE 2010). These differences are particularly acute on the most selective courses, since they rely more heavily on an applicant’s prior attainment. This means that a child born into the wealthiest 20 per cent of families is seven times more likely to attend a selective university than a child from the bottom 40 per cent (Milburn 2012: 21).

These inequalities in higher education participation are then transferred directly into the jobs market. The creation of more ‘knowledge jobs’ since the 1960s, coupled with an expansion in the number of graduates, means that employers increasingly use degree-level qualifications to screen job applicants. In a world where nearly half of school-leavers go to university, undergraduate degrees have taken on an important labour market signal – implying that candidates are bright and knowledgeable, regardless of whether their degree actually equips them for the job at hand (Wolf 2012). Higher education is also a place where social networks develop, providing students with considerable social and cultural capital that they can take with them into later life. Access to higher education is therefore an important precondition for entry to certain jobs, with knock-on effects for housing, health and social standing.

The challenge

There is a central tension in higher education, as ‘universities can serve both as gatekeepers for established orders of inequality, and as transformative institutions that enable social justice through inter-generational changes in circumstances’ (Hall 2012: 3). The challenge is to unlock the potential for higher education to expand opportunity, while mitigating its potential to reproduce patterns of privilege and disadvantage.

There have been some small but welcome developments in widening participation in recent years. Since the mid-2000s, the majority of additional places in higher education have gone to students from more
disadvantaged areas, allowing them to start ‘catching up’ with the participation rates of more well-off groups. The bottom quintile witnessed a 32 per cent increase in participation between 2004 and 2010, compared to just a 4 per cent increase in the top quintile (HEFCE 2010). Even more impressive has been the rise in participation among black and minority ethnic groups, who are now more likely than their white counterparts with the same GCSE results to attend university (Hills et al 2010).

Despite these improvements, higher education remains the preserve of the most advantaged groups in society. The recent closing of the participation gap by students from poorer neighbourhoods needs to be seen in the context of a much bigger rise in participation among more well-off groups in previous decades (Blanden and Machin 2004). Moreover, the absolute participation gap remains very large, with young people from most advantaged quintile of neighbourhoods being almost three times more likely to participate in higher education as those from the least advantaged quintile (HEFCE 2010).

Neither has widening participation been uniform across the higher education sector, with some courses and institutions having a much more diverse intake than others. Harris (2010) showed that while participation among the least advantaged 40 per cent of young people steadily increased across the sector as a whole since the mid-1990s, it remained almost flat at the third of institutions with the highest entry requirements. This is largely a reflection of the prior achievement of applicants, but there is evidence that some groups are also less likely to receive offers, even when prior achievement has been taken into account. Admissions data for medicine at Oxford University, for example, shows that white applicants with three A* grades at A-level were 94 per cent more likely to be offered a place than similarly qualified BME applicants (Ball and Parel 2013). Meanwhile, the proportion of students from state schools at the 13 most selective universities actually fell to 66.1 per cent last year, down from 66.8 per cent four years ago, despite improvements in school results (HESA 2013b).

In addition to these longstanding challenges for widening participation, a number of other worrying trends have appeared in recent years. Most obvious has been the massive drop in part-time study, which has declined by 40 per cent since 2009/10. This is particularly concerning given part-time study is an important route for advancement for those who have work or family commitments, many of whom may not have benefitted from higher education when they were younger. There is also evidence that postgraduate study is increasingly out of reach for those without significant means.

Taken together, these statistics paint a picture of a higher education sector with a student body that mirrors many of the wider inequalities in society. This problem is particularly acute on the most selective courses, which have higher proportions of students from wealthy families and who were privately schooled.
4.2 Five ways higher education can expand opportunity

1. Reaching out

Half of 16-year-olds do not achieve the minimum standards at GCSE to be able to study for A-levels, putting higher education beyond the grasp of this group (Milburn 2012). Our universities and colleges are therefore drawing from a narrow pool of applicants, which is already dominated by pupils from wealthier neighbourhoods (Chowdry et al 2008).

While it is tempting to lay the blame for educational inequality at the door of schools, this problem is too deep – and far too important – to leave to one section of the education system to address. There is much that higher education can do to reach out and help to address the educational divides that appear in wider society.

Universities and colleges can do a lot to help raise attainment outside of their own institutions through outreach. Outreach programmes are important because they enable universities and colleges to tackle the wider problem of low educational achievement, rather than focusing solely on those students who they admit to their own institution.

Outreach can take a number of forms, ranging from campus visits for school pupils to help raise their aspirations, through to much more sustained support, such as running access courses to prepare students for degree-level study. More recently, a number of universities have opted to set up their own secondary schools, bringing their considerable expertise, resources and facilities to bear on the problem of low achievement.

Examples of effective outreach: how HEIs can address low educational attainment

The UNISON/Open University Partnership

The Open University has developed a partnership with UNISON to help extend education opportunities to non-traditional learners who are in low-paid jobs and have limited previous experience of education. They encourage these workers to take part in one of the Open University’s nine ‘Openings courses’. These are short, part-time, introductory courses that have been specially designed for people with low entry qualifications. They help to develop study skills, build confidence and prepare students to enroll on more advanced courses in the future. Between 2008 and 2011 UNISON supported 1,897 students on Openings courses. Nearly 60 per cent of those students progressed on to another Open University module, with many now well on their way to achieving their qualification goal.

Source: Open University 2013
**King’s College London: Extended Medical Degree Programme**

This programme is targeted at talented pupils from disadvantaged neighbourhoods in London and the south east. Up to 50 students are admitted to the programme each year, on the basis that they show potential to succeed but may not have the same A-level entry grades as more well-off students. The programme runs for six years rather than the usual five, allowing the first phase to be studied at a slower pace. The students also receive greater support with their tuition in the first years of the programme, allowing them to ‘catch up’ with their peers. The students follow the same medical curriculum as all other medical students and undergo the same rigorous assessment at the end. This programme has created an effective pathway into the medical profession for disadvantaged pupils who demonstrate high levels of potential.

*Source: KCL 2013 and Garlick and Brown 2008*

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**A new way to fund outreach**

Despite the potential for outreach programmes to widen educational opportunities, policymakers and higher education leaders have tended to focus their resources on other things. Following the rise in tuition fees, their priority has been to provide financial support for students, primarily in the form of cash bursaries and tuition fee waivers. While this has intuitive appeal at a time when tuition fees and living costs are so high, evidence suggests that it may not be very effective at widening participation. Research undertaken by Corver (2010) showed that cash bursaries had a limited impact on the behaviour of students from disadvantaged areas, and that those students’ applications did not change in favour of universities that offered higher bursaries. This is likely to be because they were already eligible for maintenance grants, meaning the cost of living was not the main factor in their decision about where to study.\(^7\)

The introduction of fee waivers suffers from the same problem. Given that students do not pay for the cost of their tuition until later in life – when they are earning over £21,000 and hence eligible to start repaying their student loan – a discount in tuition fees gives them no immediate incentive to take part in higher education. In fact, it represents a saving for them only later in life, once they are earning a reasonable wage and have a smaller loan to repay. Spending on

\(^7\) This research was conducted under the previous fee regime, and it is possible that bursaries have become more influential following the recent rise in tuition fee. However, there is no intuitive reason why this would be the case, since students from poorer families are now eligible for a larger maintenance grant and loan.
financial support for students in the form of fee waivers and bursaries is not as effective in terms of widening participation as policymakers may have assumed. As Alan Milburn (2012) has persuasively argued, the balance of expenditure needs to shift away from direct financial support for students, towards more intensive outreach activities.

The majority of spending on widening participation comes directly from HEIs themselves, as part of the access agreements they sign with the regulator. In return for charging a fee in excess of £6,000, HEIs must commit to spending a proportion of their income on widening participation. Next year, HEIs are expected to spend over a quarter of their additional fee income in this way, amounting to a total of £610 million. Some 70 per cent of the funding will be spent on financial support for students, while only 16 per cent will be spent on outreach. OFFA predicts that this ratio will remain unchanged over the coming years, although the absolute sums invested will increase.

In addition to access agreement expenditure by individual HEIs, the government is currently phasing in the national scholarship programme (NSP), which will be worth £150 million by 2014/15. This funding stream replicates many of the same mistakes identified above, as institutions are required to spend the money on a mixture of fee waivers and bursaries.

Current funding sources are heavily biased towards providing financial support for students, which has been shown to have a limited impact on widening participation. **The Commission recommends that the balance of funding should be shifted away from fee waivers and bursaries and towards outreach programmes.** This could be done in two ways. First, the NSP should be replaced with a single ‘student premium’ (see below). This would enable HEIs to invest the money in outreach activities rather than being required to spend it on fee waivers and bursaries. Second, OFFA should require HEIs to commit to spending a greater proportion of their additional fee income on outreach activities, as part of their access agreement.

Another problem with the current system is that HEIs are encouraged to use outreach as a recruitment tool, competing against each other rather than working together to raise educational achievement (Atherton 2013). To resolve this, access agreement expenditure could be pooled by HEIs across city-regions, in order to ensure that outreach is delivered in a systematic and strategic way, with all institutions working together to raise participation rates among disadvantaged groups in their local area.
2. A student premium

If HEIs are to expand opportunity then they will need to reach out to disadvantaged communities and invest in recruiting and retaining a more diverse student intake. This sort of activity does not come cheap. Disadvantaged students can be more costly to recruit to higher education, especially if HEIs invest in trying to correct for inequalities that occur in the school system or workplace. Effective outreach programmes require HEIs to provide sustained and structured engagement with pupils from early in their school career, helping to raise aspirations and attainment.

Students from less well-off backgrounds can also be more expensive to retain once they have enrolled in higher education. Statistical analysis of student retention rates has found that students from under-represented groups or with lower entry qualifications are less likely to complete their course, which in turn might act as a disincentive to recruit them (NAO 2007). Universities that accept students who are at a higher risk of non-completion therefore have to invest more money in retention activities (Thomas 2012).

**Funding widening participation**

The government has long recognised that there are additional costs involved in widening participation in higher education. Since the 1990s a number of funding streams have grown up to support institutions that have more diverse intakes – recognising that they will need to invest more in retention and recruitment activities.

The government directly funds widening participation through two main sources. The first is HEFCE’s widening participation allocation, which is expected to be worth £318 million in 2014/15, excluding money set aside for disabled students. It is intended to support the cost of activities such as outreach in schools and extra support for students who are at risk of dropping out of their course. The funding is allocated using a formula that reflects the proportion of students an HEI recruits from low-participation neighbourhoods or with low entry grades.

The second source of direct government funding for widening participation is the national scholarship programme. The NSP was introduced last year to help mitigate the impact of the rise in tuition fees, and will be worth £150 million by 2014/15. Universities are required to match the funding they receive from government and use it to support students in the form of bursaries and fee waivers.

The NSP has been widely criticised: it is distributed according to the total number of students at an HEI – not the number of disadvantaged students – penalising those institutions that have been successful at widening participation; the money is being spent on cash bursaries and fee waivers, which have a poor track-record
of widening participation; and students do not know if they are eligible for the NSP until after they have been offered a place by an institution. It therefore makes little difference to their decision about whether to apply to university.

**The case for a student premium**

In 2014/15, the government will be spending a total of £468 million per year on widening participation, not counting the considerable sums that institutions also contribute directly. However a significant proportion of this – the NSP – is allocated in an unfair and ineffective way. While the HEFCE allocation is an important source of income for those HEIs that have done most to widen participation in the sector, there is considerable scope for improvement in terms of how funding is used by universities and how HEFCE requires them to report impact in transparent terms.

The key to this improvement will be to allocate funding in a way that enables HEIs to build up a sustainable infrastructure for outreach and retention activities. It will also be important that this process is simple and transparent, in order to ensure the buy-in of policymakers and the general public.

In this context, the pupil premium for schools provides an interesting model for reform. The pupil premium is a new funding stream to help schools address low attainment among children from disadvantaged backgrounds. The underlying assumption is that schools with large numbers of disadvantaged pupils require additional resources to help them achieve good educational outcomes. Schools are given funds based on the number of pupils who have been eligible for free school meals at any point in the last six years, or who are in care. This year schools received £600 for each pupil in this category, set to rise to £900 next year. The pupil premium has been welcomed by school leaders and policymakers. It distributes funding for disadvantaged pupils in a more transparent way than the previous funding system, and it encourages schools to think about how they use resources to tackle educational inequality. It has triggered a wave of interest in how schools can tackle educational inequality (EEF 2010).

The Commission recommends introducing a student premium of £1,000 extra per student from a low-participation area or who has received free school meals to create an incentive to recruit such students and to recognise the additional learning support some students need, funded by reallocating existing widening participation resources and the abolition of the National Scholarship Programme. HEIs would receive an additional £1,000 for every student from a disadvantaged background studying at their institution.
The student premium – a potential model

In 2014/15, the government is expected to spend £468 million on widening participation. This money could be used more effectively to fund a single student premium, where HEIs receive an additional £1,000 for every student from a disadvantaged background studying at their institution. This funding could be allocated on an annual basis for students who either come from a low-participation neighbourhood or received free school meals while at secondary school. These measures have been chosen because:

- ‘Low-participation neighbourhood’ is an existing measure of deprivation that is commonly used in higher education. It is based on ward-level data about participation rates in higher education and is correlated with poverty. It has been designed to capture all students – including mature students or those studying part-time. There are currently around 210,000 students enrolled in English HEIs that fit into this category. The major benefit of this measure is that data about these students is readily available; it applies to all England-domiciled students, including those studying part-time; and it will maintain some level of consistency with the current HEFCE widening participation allocation. The disadvantage is that, as an area-based measure, it excludes students who grow up in poverty despite living in more well-off neighbourhoods. For this reason it is necessary to include a second eligibility criteria.

- Receiving free school meals at secondary school is a common indicator of educational disadvantage in the school system, and forms the basis for allocating the existing pupil premium. There is a long-established link between students who are eligible for free school meals, low academic achievement, and low participation in higher education – and there are notoriously few students studying at selective institutions who received free school meals while at school. There are estimated to be around 40,000 young students enrolled at English HEIs that fit into this category, and it is reasonable to assume that about 20,000 of these would not be captured by the measure of ‘low-participation neighbourhood’ used above. The advantage of this measure is that it is consistent with the pupil premium allocated in schools, meaning additional funding is attached to individuals from poorer homes throughout their education; it identifies a small pool of ‘very hard to reach’ students who are being failed by the current system;
and there is a wealth of data available on these students. It should encourage selective universities to target support at high-potential free-school-meals pupils while they are still at secondary school – something which is crucial to raising participation.

On these criteria, there are approximately 230,000 students currently enrolled at English HEIs who would be eligible for the student premium; however, this would be expected to increase as the policy achieves its aim of widening participation. The student premium would initially cost the government around £230 million, but this would gradually increase to over £460 million as the number of disadvantaged students in the system doubles. Once the policy has achieved this aim, the government would be spending the same amount of resources on the student premium as it currently spends on widening participation through the NSP and the HEFCE allocation. These schemes would be gradually wound down during the transition to the new system, as the cost of the student premium steadily increases in their place.

There would be four main advantages to introducing a student premium. First, it would enable HEIs to target more effective activities such as outreach and retention programmes, rather than being required to spend their resources on less effective activities such as fee waivers and bursaries. Second, it would distribute funding in a fair and transparent way, as each HEI would receive the same amount of funding per disadvantaged student. Third, the student premium could be monitored by a single regulator, who would hold HEIs to account for all their widening participation activities. This would help to remove a lot of bureaucracy from the current system, which requires HEIs to report separately to HEFCE and OFFA on their widening participation activities. Fourth, it would help to trigger more interest in the widening participation agenda and encourage universities to be more transparent about how they use the student premium resources.

3. Crafting a more diverse student community
Lessons from the US Ivy League
Universities are highly autonomous institutions and are free to make decisions about the composition of their student body, a principle that is rightly enshrined in law. In the US, this principle of autonomy has enabled leading institutions to actively craft the composition of their student bodies. This was largely in response to the long history of racial segregation, but has been extended by some to consider questions of class and socioeconomic background.
These universities expressly aim to build a student body that is ‘more than the sum of its parts’:

‘In deciding which students to admit, [universities] consider all aspects of their applicants both as individuals and also in relation to other potential members of the incoming class. That review is intended to produce a student body that is talented and diverse in many ways, including in intellectual interests, geography, socio-economic status, background and experience (including race and ethnicity), perspective and areas of accomplishment.’

Brown University et al 2012: 7

The approach taken by these leading universities is to assess applicants on a broad range of criteria – looking at the merits of each individual applicant rather than relying solely on their school results. Selective universities are faced with a large pool of applicants who all have the potential to succeed, and they have to decide what will ‘tip the balance’ in favour of a particular student. They therefore conduct a holistic assessment of each individual – paying close attention to a candidate’s academic record as well as their talents, interests, aspirations and family background. The race of an applicant is simply an additional factor among many that they take into consideration.

For some critics, the notion that students are admitted on any grounds other than their school exam results is a risk to academic excellence. However, the sheer volume of leading universities that adopt and robustly defend this approach to admissions – including Harvard, Yale, Princeton and MIT – demonstrates that it is consistent with academic excellence. These universities would not risk a threat to their reputation as world-class institutions unless they believed that actively crafting diverse classes enhanced their undergraduate community. The benefits of this approach were outlined by the president of Princeton in her welcoming address to new students in 2005:

‘Princeton also offers you a once-in-a-lifetime opportunity to connect with men and women whose lives have differed dramatically from your own; who view the world from a different vantage point. Never again will you live with a group of peers that was expressly assembled to expand your horizons and open your eyes to the richness of the human condition ... The reason the admission office took such care in selecting all of you – weighing your many talents, your academic and extracurricular interests, your diverse histories – was to increase the likelihood that your entire educational experience, inside and outside the classroom, is as mind-expanding as possible.’

Shirley Tilghman, cited in Brown University et al 2012
Universities in Britain should follow the best practice of the US Ivy League in recruiting and ‘crafting’ diverse and representative student intakes. This is to ensure that students are educated not merely for individual advancement but also to be effective and responsible leaders with an understanding of an increasingly diverse society and interconnected world.

Creating a level playing field

English universities do not generally think in terms of ‘crafting’ the composition of their student body, preferring instead to rely on A-level results as their primary means of selection, in addition to UCAS forms and, in a small number of cases, interviews. This approach has generally been defended on the basis that setting a single admissions point score creates a ‘level playing field’ for all applicants. It is deemed to be fair because all applicants have to compete against the same criteria.

The justification for this approach relies on a particular definition of what constitutes a ‘level playing field’. It assumes that A-level results are a sound indicator of an applicant’s academic potential – and therefore that those applicants who get lower grades at school are less likely to do well at university. Under this logic, setting a single A-level benchmark for all candidates to reach does indeed create a level playing field.

However, there is an alternative conception of what constitutes a ‘level playing field’. This approach argues that the school grades of some applicants may misrepresent their academic degree potential. Applicants may have suffered educational inequality – for example, by attending a poor-quality school or having less resources spent on their education – which means they achieved lower A-level grades despite having just as much ability and potential to succeed at university. Under this logic, a ‘level playing field’ would be one where applicants are assessed on their potential to get a good degree, rather than simply on their prior academic achievement.

Detailed analysis of student achievement data supports the second definition of ‘level playing field’. These studies track students who entered university with the same school results, and find that pupils from state schools or disadvantaged neighbourhoods are more likely to succeed than their privately schooled counterparts (Hoare and Johnston 2010, Ogg et al 2009, HEFCE 2003).

It can be argued, therefore, that in order to create a level playing field some applicants should be admitted to university with slightly lower grades, on the basis that they display more academic potential to benefit from the degree programme than their wealthier and ‘better-qualified’ counterparts.

While the use of contextual offers can help selective universities to admit students on the basis of their academic potential, the fact remains that
the most selective courses are often heavily oversubscribed. They are flooded with applications from candidates who all have the potential to do well at university and who could all benefit from the degree programme on offer. Admissions tutors on these courses are faced with the difficult task of turning away well-qualified applicants. It is in situations like this that US universities operate the notion of ‘crafting classes’ to help them decide which applicants to admit. They look at every applicant who is deemed to have the required level of academic potential, and weigh up their individual talents and backgrounds in order to craft a rich learning environment. This may include an applicant’s race, just as it may include their sporting or cultural accomplishments. As Harvard’s Committee on Admissions explains:

‘When the Committee on Admissions reviews the large middle group of applicants who are ‘admissible’ and deemed capable of doing good work in their courses, the race of an applicant may tip the balance in his favour just as geographic origin or a life spent on a farm may tip the balance in the other candidate’s cases.’

Harvard University, cited in Dworkin 2013

It is important to stress that these universities do not adopt quotas for particular groups and always take a candidate’s entire application into consideration – race and social background are just two factors used among many.

From contextual admissions to contextual offers
A number of universities in England now use data about an applicant’s background in their admissions process. For example, Oxford and Cambridge have a system of ‘flags’ next to each applicant, which indicate if they come from a disadvantaged neighbourhood, were in receipt of free school meals, or have been in care. The intention is that admissions tutors can take these factors into account when deciding whether to interview an applicant. UCAS has also developed a system to highlight applicants who may have suffered educational inequality.

The exact way in which contextual data is used varies between institutions. It can be taken into consideration at various stages of the application process, including shortlisting, interviewing, making offers, or confirming places for those whose results are borderline. The universities that use contextual data stress that it should not be applied in a mechanistic process. They view it as a tool to assist selectors, who continue to be allowed to use their professional judgment (Bridger et al 2012).

A recent survey found that 41 per cent of universities use contextual data in some form, and it is most common among selective institutions.
The survey found that contextual data largely achieves its aims of improving fair access and identifying academic excellence – ‘it ensures that admissions processes do not exclude applicants with the potential to succeed in higher education but who have not yet had the opportunity to realise their full potential’. There is also anecdotal evidence that it gives students from disadvantaged backgrounds greater confidence to actually make an application (ibid).

However, very few institutions use contextual information to make lower offers to candidates, or to deliberately ‘tip the balance’ in favour of equally qualified candidates. While they are prepared to use contextual information to decide whether to interview an applicant, they still insist that every candidate meet the same A-level benchmark. This is despite calls for greater use of contextual admissions from a number of official sources, including the government’s latest higher education whitepaper (BIS 2011), OFFA, HEFCE and the Independent Reviewer on Social Mobility (Milburn 2012).

While there has been sustained and vocal opposition to the use of contextual offers from leaders of private schools and the press, a handful of universities do give slightly lower offers to applicants from disadvantaged state schools, believing that these applicants are just as likely to excel at university, but are currently excluded by the grade threshold for entry to many courses. Research has shown that these policies are justified on the grounds of widening participation and raising academic standards. For example, a study tracking the achievement of different groups of students at Bristol University found that students from state schools, low-performing schools and low-participation neighbourhoods tended to be admitted on slightly lower A-level results but went on to score above average in their degrees (Hoare and Johnston 2010).

This study suggests that it is possible to admit students on the basis of their potential to get a good degree, rather than using a single A-level benchmark for all candidates. However, this will only works when candidates have slightly lower entry grades, in the region of one or two grades lower. It also demonstrates that when faced with equally qualified candidates, a university is justified in taking into account their individual contexts to help ‘tip the balance’ in favour of one of them.

**The Commission recommends the more widespread use of contextual admissions data so that lower offers can be made to students from disadvantaged backgrounds.** This would be an extension of current practice, which generally uses contextual data simply to ensure some applicants receive an interview.

In order to incentivise selective universities to make greater use of contextual offers, two barriers will need to be removed. First, university league tables will need to be reformed to ensure universities are not
penalised for making lower offers to disadvantaged students. One of the measures used to compile university league tables is the average UCAS points score of the students it admits. Applicants and university governors place considerable weight on this measure, as higher average entry grades are equated with higher prestige. There is therefore a strong disincentive for universities to use contextual data and lower their offers for disadvantaged students, regardless of whether they have greater academic potential.

League table compilers should exempt 10 per cent of the lowest grades from entry tariff calculations, provided universities commit to using them for contextual offers. This process could be regulated by OFFA, who would have to be satisfied that the lowest 10 per cent of offers genuinely reflected the use of contextual data to widen participation.

Second, student number controls should be reformed to enable selective institutions to make more contextual offers. The government is currently controlling student numbers by restricting the ability of selective universities to recruit students below grades ABB. Universities with high proportions of AAB students therefore only have a small number of ‘core places’ to accommodate students that do not have top grades. This means they have less flexibility to use contextual admissions, as they are prevented from offering places to students from disadvantaged backgrounds with lower entry grades (Thompson and Bekradnia 2011, Morgan 2012). HEFCE has recently tried to address this problem by allowing selective institutions to recruit a larger number of students from outside of the AAB threshold. However, there is no guarantee that these places will benefit disadvantaged students in particular.

The Commission recommends that any students eligible for the student premium are removed from the number controls of selective institutions, who have a very small number of core allocations. These students would not count towards the institution’s number controls and they would be free to compete to attract as many of these students as possible – in exactly the same way that they are free to recruit as many students with grades ABB+ as they like. This policy therefore uses the same logic of removing a group of students from number controls, but makes it work for the most disadvantaged students in society, rather than the most well-off.

The advantage of this policy is that it overcomes one of the barriers that prevents selective universities using contextual admissions policies. They will be free to make contextual offers to disadvantaged pupils with high levels of academic potential. It also helps to create a package of reforms that is consistent with the student premium. The policy should initially be limited to institutions that have very small core allocations, for example those where more than 90 per cent of students are admitted.
with grades ABB+. This is because it is these institutions that have been most heavily disadvantaged in their ability to use contextual admissions by the change to number controls. Other universities should still have the capacity to make contextual offers using their core allocation of places. Restricting the policy to a small number of institutions should also allay the Treasury’s fears that it will be unable to control the overall number of students in the system. However, over time, the Commission envisages that number controls could be further relaxed, provided the cost of student loans to the government is reduced (see chapter 6). The government should therefore model the possibility of exempting students who are eligible for the student premium from number controls at all institutions, or even removing number controls altogether.

4. Addressing the crisis in part-time study

The importance of part-time study

Throughout history, some of the most transformational innovations in higher education have been those that expanded learning opportunities to groups of people who, for various reasons, were unable to take part in traditional forms of university study. One of the most important in this regard was the creation of courses that allowed students to study part-time. Part-time study allows learning to be combined with work and family commitments – it therefore enables many people to study for a higher education qualification who would otherwise be prevented from doing so.

Around one-third of undergraduates in England currently study on a part-time basis, and they tend to fall into two distinct groups. On one hand, there is a pool of part-time students who have low entry-level qualifications and are taking the opportunity to improve their education later in life. Part-time courses are an important ‘second chance’ for people who missed out on education earlier in life. On the other hand, there is a large pool of part-time students who already have a higher education qualification. These students tend to be using higher education to specialise in a particular subject or change their career path (Callender 2013). Around 80 per cent of part-time students combine their studies with work, and the majority are in full-time public sector jobs. Part-time courses are therefore an important route for upskilling the public sector workforce, with many studying professional certificates in areas such as early years education, health and social care (ibid).

As a result of these characteristics, the composition of the part-time student body is markedly different to that of the full-time intake. Part-time students are older and more likely to be female, and as a result they are four times as likely to have family responsibilities. Given their work and family commitments, part-time students are also more likely to be rooted in particular places. Their access to higher education is therefore strongly determined by where they live, since they are less able to travel
to a different city for their course. They are also much less likely to be entering with A-levels or to be studying for a bachelor’s degree.

This brief sketch shows that part-time courses are an important progression route for a distinct group of the population, who are not well served by more traditional full-time degrees. It also shows that part-time study is more closely linked to the needs of employers, with large numbers of students studying for professional certificates directly allied to their job. Greater use of part-time study could therefore be an important ingredient for raising the skills base of the adult population, and helping to overcome the educational divides that extend into adulthood.

The decline in part-time study
Over the last decade there have been some concerning trends in part-time study. While the number of full-time students increased steadily throughout the 2000s, the numbers studying on a part-time basis were much more volatile. A large expansion of distance learning, driven entirely by the Open University, led to a 13 per cent increase in overall part-time enrolments. However, this masked a levelling-off of part-time numbers at other institutions, several of whom actually witnessed a decline in their intake. This decrease probably reflected the fact that tuition fees were increasing, deterring students and employers from investing in part-time courses – a problem that was made worse by the fact part-time students were not eligible for fee loans. It may also have been the result of decisions taken by some university managers to reduce their part-time offer and focus instead on attracting the growing number of full-time students, who provide a more stable source of income.

This slowdown in part-time enrolments turned into a more substantial decline in the late 2000s, following the decision by the Labour government to withdraw support for many part-time courses. The government removed funding for students who were studying for a qualification that was at an equivalent or lower level than one they already held. The logic behind withdrawing the so-called ‘equivalent or lower qualification (ELQ) funding’ was that the government shouldn’t subsidise courses for those who have already benefitted from higher education. While this change did not have a big impact on full-time study, around two-thirds of part-time students were captured by the ELQ rule, many of whom were people trying to switch career or develop a specialism. In addition to the introduction of the ELQ rule, the onset of the recession in 2009 will have had an impact on part-time enrolments, as adults and employers facing financial pressures have become less keen to invest in courses.

Numbers of part-time students had therefore already started to decline at the end of the 2000s, but they plummeted after the hike in tuition fees under the Coalition government. Since 2010, part-time undergraduate...
entrants have fallen by 40 per cent, equivalent to 105,000 fewer students (HEFCE 2013b), and early indications show that there will be a further 33 per cent drop in 2012/13 (Maguire 2013). The increase in tuition fees has exacerbated the decline in part-time numbers.

What caused the sudden decline in part-time students?
The absence of adequate data on part-time students makes it difficult to identify precisely what has caused the decline in recent years. Nevertheless, it is possible to identify a number of likely factors:

- Students and employers are not able to afford high tuition fees. Unsurprisingly, undergraduate part-time tuition fees have risen as a result of the government’s recent reforms. Callender (2013) shows that fees range from £3,000 to £9,000 a year, with universities such as Birkbeck, Plymouth and Hull all charging the maximum fee. While the majority of full-time students are able to fund their tuition through government-backed loans, this option is not available to many part-time students. The rise in tuition fees will also present problems for employers who may previously have sponsored their employees to enrol on a part-time course as part of their training.

- Two-thirds of part-time students are not eligible for fee loans. In order to mitigate the impact of higher fees, the coalition government introduced income-contingent loans for part-time

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8 Students study at different levels of intensity, so to make the tuition fee comparable the tuition fees listed here are for a full-time-equivalent course.
students. This was a welcome move, as part-time students had previously had to fund the cost of their studies upfront. However, the ELQ rule means that eligibility for loans is heavily restricted. Only part-time students who do not already have a bachelor’s degree are eligible for a loan, which excludes about 54 per cent of the current cohort. In addition to this, only students who are studying at an intensity over 25 per cent of a full-time course are eligible for a loan, excluding a further 15 per cent of students from financial support (Callender and Scott 2013). As a result of these restrictions, only a third of all part-time students were eligible for student loans this year. As Callender (2013) explains, this means that ‘two-thirds of students are ineligible for the new loans and yet they are faced with much higher fees that they have to pay upfront’.

- Part-time students are not taking out fee loans. The government estimated that around 175,000 part-time students would be eligible for fee loans under the new funding system. However, last year just 31,700 part-time undergraduates successfully applied for loans (1994 Group 2013). It is therefore clear that many eligible students are not actually applying for fee loans. This may be because of a lack of awareness or because they are unprepared to take on the additional debts given other rising costs they face.

- The recession and subsequent spending cuts have reduced demand for part-time study. Historically, around a third of part-time students have received help with their fees from their employer. However in a time of recession and rising upfront fees, employers may no longer be prepared to make this commitment. In 2011–12 the number of employer funded part-time students declined 9.9 per cent on the previous year, contributing to a loss of 12,485 students (1994 Group 2013). Part-time enrolments will be especially sensitive to cuts in training in the public sector, given the large numbers of part-time students studying for qualifications in areas such as early years, education, health and social care.

- Higher education institutions face disincentives to recruit part-time students. Part-time students have always been expensive for institutions to recruit and retain. This is partly because they require services to be provided at unusual hours, but it is also because they have a higher likelihood of not completing their course, making part-time students a greater financial risk for HEIs than full-time students. Until last year, these additional costs were recognised by HEFCE, which awarded institutions additional funding in the form of a ‘part-time premium’. However, this funding has now been cut, meaning HEIs face even fewer incentives to recruit part-time students.

- It is also the case that there may be a cohort effect: given the expansion in the numbers of 18-year-olds going into higher
education in recent decades, there are now fewer people in the adult population without a degree, which may have reduced the demand for part-time learning among mature students over time.

How could we stem the decline in part-time study?
It is difficult to make concrete policy recommendations without more data on what has driven the decline in part-time study. Nevertheless, there are a number of steps that policymakers could take to help mitigate the worst impact of recent changes. The government should expand eligibility for part-time loans. While in an ideal world the government would be able to extend student loans to all ELQ students, this would be prohibitively expensive in the current climate.

The Commission recommends extending loans to ELQ students on certain courses that are deemed strategically important for the nation’s industrial strategy. For example, it could extend loans to ELQ students studying towards a STEM subject (science, technology, engineering or maths), or qualifications that are key to business services and creative industries. There would be a low cost involved to the government, since the majority of these students are already in well-paid jobs and are therefore likely to repay the full cost of their loan (Callender 2013). This change would assist people who want to retrain but are prevented from enrolling on a part-time course by the upfront costs involved. It would also help to build the nation’s skills in strategically important sectors of the economy.

Over the long term, more fundamental reforms may be needed. Ultimately, the current system of high fees backed by large student loans is designed around the needs of young full-time students. The assumption is that a young person will study full-time for a bachelor’s degree before working to repay their debt, and the funding system has been designed accordingly. The unexpected consequence of this system has been the decline in part-time students. These students are often sponsored by their employers to study for professional certificates, and the majority are adults seeking to combine small chunks of education with work and family commitments. They are therefore not well served by a funding system that requires them to take out a large loan to cover the cost of an entire qualification. For this group of students, it may be more appropriate to shift towards a funding model where individual credits or modules are priced separately by institutions. This would make the upfront costs more

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9 Our modelling of part-time students, presented in the technical appendix (available separately – see note 18), suggests that part-time students in aggregate will ‘overpay’ the total value of their loans by 8.5 per cent. This is because they are charged a real rate of interest and are more likely than full-time students to repay their entire loan. However it is important to note that all estimates of the repayment rates on part-time loans are tentative. This is because the loan system for part-time students is new, and it is not yet clear exactly which type of students are registering for them. Nevertheless, the Treasury can be confident that part-time students studying subjects that are strategically important for the economy are likely to repay the full value of their loan.
manageable, and smaller loans could be made available to cover each one. While full-time students would still be able to take out the maximum loan to cover an entire qualification, part-time students and employers could build up their qualification in smaller chunks.

5. Improving access to postgraduate studies

The lack of a postgraduate loan system

‘Everyone agrees that nobody should be barred from undergraduate education because they can’t afford fees, and yet we completely accept this barrier when it comes to post-graduate education. The fact is, post-graduate education is not a luxury for the individual, it is a necessity for our economy and wider society.’

Alan Milburn, cited in HECSU 2012: 5

In the last few months, postgraduate education has received increasing attention in policy circles as the ‘new frontier in widening participation’ (HEC 2012) and a potential ‘social mobility time bomb’ (Milburn 2012). The main issue with postgraduate study is that there is no loan system – equivalent to that for undergraduate study – available for postgraduate study. Therefore, as the NUS puts it:

‘Whilst a handful of the brightest and most underprivileged graduates may be fortunate enough to find funding from the research councils or institutions, the majority of graduates from poorer backgrounds will not have access to the necessary funding to continue their studies [after an undergraduate degree].’

NUS 2012a: 1

Without access to a government-funded loan system, many students wishing to pursue postgraduate studies are put off from doing so, particularly those without the means. This is evident from the fact that UK-domiciled students are increasingly being outnumbered by international students on postgraduate courses in English institutions. While overall postgraduate enrolments increased by more than 200 per cent between 1999 and 2011, the number of home and EU students doing postgraduate degrees increased by just 18 per cent.

Those home-domiciled students who do decide to pursue postgraduate studies without means to pay upfront often find themselves in ‘crippling debt’ and in danger of dropping out of their courses if they end up in financial hardship during their degree (ibid: 1). It has also led to a worrying trend of postgraduate students apparently funding their study through ‘potentially disastrous measures such as credit cards, overdrafts and personal loans’ (ibid).
The renewed attention to the lack of a postgraduate funding system has been driven by the worry that debt from undergraduate studies will lead to even more people being put off from pursuing postgraduate studies.

The benefits of postgraduate study
There are a number of individual benefits associated with pursuing a postgraduate degree, including better access to some professions and a higher wage return.

• Better access to professions: The possession of a postgraduate degree is increasingly becoming a requirement for employment in a number of sought-after professions, while in others it is becoming a proxy for direct experience, or is simply used by employers as a filtering mechanism. The Higher Education Commission on postgraduate study found that employers were increasingly requiring postgraduate qualifications for certain roles, including legal positions, engineering jobs, and scientific roles in biotechnology firms (HEC 2012: 44). Similarly, the Milburn review noted that postgraduate degrees are becoming a requirement to entry to competitive professions such as journalism, accountancy and academia (Milburn 2012: 72).

• A higher wage return: The wage gap between workers with an undergraduate degree and those with a postgraduate degree has increased in the past two decades. While the wage premium for postgraduate workers increased by 0.075 log points between 1996 and 2011, the wage premium for undergraduate workers stayed ‘basically flat’ (Lindley and Machin 2012: 276). As a whole, Lindley and Machin argue that postgraduates have seen ‘the biggest wage gains across the whole education spectrum, raising wage inequality and holding back social mobility’ (ibid: 284).

Because postgraduate study has these benefits, the fact that students are in effect ‘barred from study if they cannot afford fees or access sufficient credit’ (HEC 2012: 6) is of urgent relevance to goals around social mobility and social justice. As Lindley and Machin (2012) show, the result is a decrease in social mobility since it means that postgraduate courses primarily enrol people from relatively wealthy family backgrounds that can afford to pay fees upfront. These graduates then gain an advantage in the labour market due to their advanced qualification, which is inaccessible to many less-well-off graduates. Without a fair funding system at the postgraduate level, we therefore risk losing many of the gains made from widening participation at the undergraduate level.

In order to ensure that all students who can benefit from postgraduate studies have the opportunity to do so regardless of their financial means,
the Commission recommends that the government creates a new postgraduate loan system that enables fairer and wider access to taught postgraduate courses. In chapter six we explore the financial implications of this, but because a postgraduate loan would be repaid at a lower income threshold – before a graduate starts to pay off their undergraduate loan – we believe that this would, on balance, be more readily affordable to the Treasury. However, the Treasury may need to limit the number of postgraduate loans that it issues, in order to prevent a costly expansion of places.

4.3 Conclusion
We have argued that higher education has a crucial responsibility to expand opportunity. Our access and participation package involves: switching funding from ineffective fee waivers and bursaries and towards intensive outreach programmes; introducing a student premium to provide for a more effective allocation of existing widening participation funding and to encourage institutions to select more disadvantaged students; allowing expansion in the number of contextual offers by allowing unlimited recruitment of disadvantaged students by selective institutions and by not counting these ‘student premium offers’ towards university league table positions; by extending student loans to many more part-time students, particularly in sectors that are strategically important for the country; and by establishing a government-funded loans system for taught postgraduate degrees.
If our higher education system is to succeed in the future it must respond to the higher aspirations and more diverse needs of the next generation of students. Students of the future will choose between universities across national borders and demand more flexible forms of learning that enable them to retrain while in work or raising a family. They are also likely to have greater expectations of HEIs, given that they are themselves meeting much of the cost of their course. The challenge for our higher education system is to ensure that it is responsive enough to adapt to these evolving needs and higher expectations.

The government has sought to ‘put students at the heart of the system’ by increasing market pressures on universities, arguing that greater competition will put students in the driver’s seat, improve teaching, drive down costs, and encourage innovations in educational delivery (BIS 2011). We agree that empowering students by providing them with more information should help to make universities and colleges more responsive and that competition between institutions can encourage HEIs to raise their game.

However, we do not believe that our higher education system can be configured by market forces alone. First, we need a system that actively champions excellence in teaching and learning, and this cannot be achieved by relying just on choice and competition. There is much to be proud of in our system, but we need to go further to ensure that teaching is properly recognised and developed, that universities make the most of new learning technologies, and that students are treated as active participants in improving teaching and learning. Second, we ought to promote collaboration as well as competition – most importantly, to help students enter and transfer within the system and to help institutions share risk and build critical mass. Third, there is a strategic role for the state as a guarantor of the wider public and national interest.

5.1 Putting students at the heart of the system
The government has introduced a number of reforms that it hopes will, in its own words, ‘put students at the heart of the system’. Many of the reforms have been based around removing regulations and introducing greater market competition to the sector with the aim of enhancing quality, reducing costs and making the system more responsive to the needs of students.
There are a number of elements to this programme.

- Higher fees: The biggest policy change introduced by the government’s higher education white paper was to raise the cap on undergraduate tuition fees to a maximum of £9,000. Once the new fee regime is fully in place, fees will represent about 80 per cent of total teaching income to HEIs, replacing most of the teaching grant previously provided by HEFCE. The remaining 20 per cent that will still administered by HEFCE will go to a small number of priority areas, such as widening participation and supporting vulnerable, high-cost subjects.

  The rationale behind the rise in fees was to create a more responsive higher education sector in which the funding for teaching ‘follows the student’ to a much greater extent (BIS 2011: 24). This is intended to encourage institutions to compete to attract the funds that students bring with them. The idea is that those institutions that are able to attract students should be allowed to expand, while less popular institutions would need to shrink, lower their prices, or work out strategies to improve recruitment (by improving quality, for instance).

- Improved information for students: Along with a higher cap on fees, the government also introduced initiatives to improve and expand the information available to prospective students about individual courses at different HEIs. The government established the ‘key information set’, which provides course-level information about factors such as student satisfaction rates, type of summative assessment, graduate employment rates and salary income after graduating. This information is made available to prospective students on the website UniStats in an accessible format that allows users to compare data on different courses. This is to ensure that students can make informed choices about their higher education pathway, and to put pressure on institutions to improve the quality and efficiency of their provision in response to student demand and preferences.

- Looser student number controls: The government also sought to introduce more competition for students by loosening student number controls on HEIs to enable popular institutions to expand in response to demand. However, the government is prevented from introducing a genuinely free market where the supply of student places can increase freely to meet demand because student numbers still need to be limited in order to keep the costs of the student loans book down. In an attempt to introduce more competition for students, while still limiting the total number of places, the government has introduced two policies:

  - Unrestrained recruitment of students who achieve AAB or above at A-level:¹⁰ This allows the most selective institutions to expand in response to student demand and therefore makes it less likely that high-achieving students will be turned away from their first

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¹⁰ As well as certain equivalent qualifications, as specified by HEFCE.
choice university simply because of arbitrary caps on numbers. This year the policy has been adjusted so that students achieving ABB or above will be freed from number controls.

- Expansion of low-cost places through the core-and-margin policy: In an attempt to cap overall numbers, the number of places allocated for students achieving below the AAB threshold is reduced by 8 per cent. Some of the places from this 8 per cent are then put into a ‘margin pool’ which institutions are able to bid for, so long as their average net fee is below £7,500. The aim is to incentivise institutions to lower their fees if they want to bid for these places. This year this policy will be adjusted so fewer places are available through the margin pool, and a handful of these will be available to institutions charging between £7,500 and £8,250.

- Paving the way for new providers: The government is keen to encourage new for-profit and non-profit institutions to enter the higher education market. The intention is to create a diverse range of providers competing against one another on a level playing field to attract students and drive down the cost of provision. To this end the government has sought to expand the number of student places allocated to further education colleges through the core-and-margin policy. The government’s higher education white paper also included a plan to make it easier for ‘alternative providers’ (including further education colleges and private companies) to achieve degree-awarding power and the ‘university’ title, and to gain access to government-funded student loans.

Strengths and weaknesses of the government’s approach
We believe there is merit in much of the government’s approach. First, open data helps to hold providers to account and makes them more attentive to the needs, interests and views of students. Second, the pressure to attract students in order to get funding encourages institutions to be more efficient with their resources, and it may encourage them to spend them on things that will enhance the student experience, such as close contact time, training in teaching methods, and good access to resources. Finally, the introduction of new providers to the sector, along with the pressure to be more competitive, can help to meet gaps in provision and encourage the whole sector to become more innovative, entrepreneurial and cost-efficient.

However, there are several reasons why market competition and student choice alone cannot succeed in ensuring high standards and meeting the needs of students and wider society.

- So long as demand outstrips supply, in many cases universities are choosing students and not the other way around. The most popular universities face little pressure to improve their provision because they already attract as many students as they can admit.
• Higher education is a positional good, and student choice is largely driven by a university’s position within hierarchical rankings, rather than its price or teaching quality. In fact, when the fee rise was introduced, many institutions were worried about the reputational damage that would come from offering a lower fee, which is one reason why we have seen so little price variability in the system.

• Universities are not simply driven by a desire to expand and take on more students: many are just as or even more focused on their institution’s research performance.

• Students cannot ‘switch brands’ as with other consumer products, as there is limited scope to transfer between institutions.

• Competition on price may not work simply because the cost of a degree is paid back over a lifetime in the form of a large loan; students see little difference between repaying fees of, say, £8,000 and £9,000 a year over the course of their working lives.

Moreover, if not properly managed and balanced by countervailing forces, marketisation could have a number of negative effects.

• Without sufficient regulation, new providers such as MOOCs and the for-profit sector may compete on price alone, and provide poor quality. This could be bad for students, the nation’s skills base and the reputation of English higher education.

• The need to run courses that are popular (in order to attract funding through tuition fees) appears to be decreasing diversity in the sector. A recent survey found that the number of undergraduate courses has dropped by over a quarter in the last six years (UCU 2012). There has been a particularly big drop in language degrees, and – despite a recent upsurge – the number of single honours science courses remains lower than it was in the 1990s. As a consequence, those wanting to study minority subjects have actually seen their options reduce rather than increase as a result of marketisation. While these changes may reflect consumer tastes among a majority of students, they are not necessarily in the national interest, as they could lead to skills gaps in key areas.

• HEIs are vital anchor institutions in their local areas, attracting skilled workers and generating opportunities for local people. It would be problematic, particularly in towns where there is just one university, to allow an institution to fail because of market pressures. In cases of institutional failure, there is a need for proper public intervention to facilitate mergers and manage closures where unavoidable. This is common in our school system but we lack a proper failure regime in higher education.

• Competition can be healthy but any successful self-improving system also requires collaboration. Collaboration is important, for instance, to help institutions compete for research funding and to facilitate transferability and progression within the sector.
The government’s exclusive reliance on competition and student choice to drive improvements in the system is also symptomatic of a larger failure to address in a coherent manner the complex challenges facing the sector. The government has failed to produce a Higher Education Bill, which is needed to provide a clear and consistent framework for our higher education system. This has created policy uncertainty around the future direction of student number controls and a lack of clarity about what happens when universities fail and about the regulation of new entrants to the sector. In the remainder of this chapter we explore the changes that are required to make our higher education system more responsive to students while continuing to serve the wider public interest.

5.2 Championing excellence in teaching and learning

Successive governments have placed considerable emphasis on improving the information that is available to prospective students about the quality of courses and institutions. The publication of more information has been a positive move, helping to inform the decisions that students make about courses and pushing universities to address areas of weakness. However, the publication of this information will not be sufficient to drive improvements in the quality of teaching and learning. This is because prospective students rarely make decisions based purely on evidence of the teaching quality of different courses. Rather, they are influenced by a host of other factors, including the institution’s reputation and prestige, its location and social environment, and what type of students go there, as well as advice from family and friends (see Grove 2012, Murray 2012). Therefore, we cannot rely simply on student choice and more information to drive the quality of teaching and learning.

The clear implication of this is that there is an important role for the sector itself – supported and encouraged by the relevant regulatory body – to champion excellence in teaching and learning. We explore three ways the sector can do so.

Students as partners in teaching and learning

Education cannot be treated like a transactional service or a consumer good, in which a teacher simply imparts knowledge to a student. It requires students to be actively involved in the process of learning, and to build trusting relationships with tutors, peers and the broader academic community.

Historically, students’ influence in shaping their university experience has tended to involve student representatives sitting on formal decision-making bodies. For example, most institutions invite student representatives to sit on committees and councils and to be part of quality review teams. These are important steps, which have been
actively encouraged by organisations such as the QAA and NUS. While this sort of formal representation can help ensure that student voice is incorporated into university governance structures, it ignores the importance of partnership between academics and students at a more ‘everyday’ level.

Students can be important drivers of quality in higher education when they are treated as active participants in learning, entrusted to help shape the content and delivery of courses. It is now commonplace across the sector that students are asked to give feedback on their courses and to evaluate their teachers’ performances (Trowler 2010). At some institutions, students are also invited to help teach or support fellow students, and sometimes even to help design subject curricula. Some examples of innovative approaches to engaging students as active participants, contributors and co-creators in their university experience are given below.

Three case studies of innovative approaches to student engagement

**Student Academic Partners scheme (SAP), Birmingham City University**

Launched in 2009, this new partnership between the university and student union aims to integrate students into the teaching and pedagogic research communities of the university to enhance the learning experience. Staff and students are invited to propose educational development projects, in which students can work in an academic employment setting in a paid post at the university, on an equal footing with their staff partner. Students negotiate their own roles with staff and are paid for up to 125 hours of work. Each project is designed to develop a specific aspect of learning and teaching practice. Typically, these may result in new learning resources, developments in curriculum design, or the evaluation of innovations and changes that have already been made.

It’s critical to the scheme that students are employed as partners rather than assistants, co-creators rather than passive recipients of the learning experience. Some projects are even initiated and led by students. The SAP scheme is part of a wider university initiative to create a greater sense of learning community in which students and staff view it as the norm, not the exception, to be engaged in academic discussions about the nature and delivery of their courses.

*Source: Birmingham City University 2013*
**Students as Change Agents, Exeter University**

Students as Change Agents is a scheme that enables students to take an active part in improving their university experience. Students are encouraged to identify areas that they would like to see improve, especially relating directly to teaching and learning. They can then research solutions with fellow students and receive help from the university to put their ideas into action.

The benefits to students are the chance to be active participants in improving their university experience and the satisfaction of leaving a legacy for future students. On top of this, participating students get to develop skills in research, project management and communication, all of which help make them more attractive to future employers.

Source: Exeter University 2013

**Peer Assisted Learning (PAL), Bournemouth University**

Several institutions now run peer-assisted learning (PAL) schemes, designed to foster ‘cross-year support between students on the same course’. One of the pioneers of this approach is Bournemouth University, which has run a PAL scheme since 2001.

The university trains second-year students to become PAL leaders, who help first-year students to adjust to university life, develop independent learning and study skills, and enhance their understanding of learning material through collaborative group discussion. The PAL scheme is not meant to replace teaching undertaken by lecturers, but rather is a way to support this teaching in a way that benefits all partners: the department, lecturers and students.

The PAL leaders also benefit greatly from participating in the scheme, as they get to improve their communication and teaching skills, as well as their own understanding of the subjects they are studying.

Source: Bournemouth University 2013

There are a number of potential benefits of engaging students as active participants in their university experience, including:

- improved student engagement and a strong learning community, which are essential for high-quality learning
- improved dialogue and trust between students and staff, which help to create the conditions for high-quality learning
- a sense of ‘ownership’ of improving practice among staff and students
• wider public benefits, such as creating citizens who feel empowered and committed to shaping the world around them for the better.

In order to truly empower students, students must not just be given information and choice, they should also be enabled to shape their higher education experience and be active participants in the improvement of teaching and learning while they are still at university or college. The Commission recommends that institutions commit to engaging students as active partners in the improvement of teaching and learning, for instance by involving them in research projects, design of curricula, and peer-to-peer learning schemes, as well as by ensuring that they are properly represented in formal institutional structures. Our revised quality assurance and regulation body (see below) would act as a clearing house for best practice in these areas and – in collaboration with the HEA (Higher Education Academy) and the NUS (National Union of Students) – should support institutions to improve student engagement.

Teaching and learning in a technological age
Perhaps the most talked-about trend in higher education media circles in the last two years has been the rise of internet-mediated learning technologies, particularly MOOCs. The hype around massive open online courses is a reflection of several factors, including their rapid rise over a short period of time, their adoption by prestigious universities (including Harvard, MIT, and Stanford in the US), the perceived novelty of their product offering, and their seemingly transformational potential. However, their implications for the future of teaching and learning are still uncertain.

One thing that is clear about new learning technologies is that they have ground-breaking potential to open up learning and content to a wider segment of the population. For instance, MOOCs have already led the way in providing learners with opportunities to follow lectures and content from leading experts at no cost. The availability of such learning opportunities is clearly a positive development.

However, it is unlikely that MOOCs will – or indeed should – be a one-to-one replacement for existing modes of higher learning. This is because there are important components of higher education that MOOCS are unlikely to be able to deliver to the same standard as physical institutions.

• Universities and colleges enable interactive learning and critical thinking. They give people the initial grounding to engage with complex material and topics, facilitate learning through discussion, and enable interaction and feedback in a way that we cannot do currently through technology.

• Online courses offer broken down, specific knowledge in discrete areas, not the kind of synthetic, critical, immersive approaches offered by universities.
• More widely, MOOCs cannot replicate the university or college experience, which involves being part of a community of learners, often at a formative stage in life.

Given how important these factors are to learning outcomes and student satisfaction, it seems likely that traditional forms of higher education will continue to be relevant and critical for the foreseeable future.

Online technologies are therefore unlikely to replace what universities offer – but they do offer new opportunities for universities to augment classroom learning and transform people’s opportunities to learn. Universities are likely to make increasing use of blended or hybrid delivery forms, which combine online and face-to-face class time. This is also sometimes called the ‘flipped classroom’, a model which involves moving the traditional lecture (or content dissemination) to an online delivery format, while using the face-to-face time in classes for practice, application and discussion of the content. The logic is to make face-to-face time more effective, while pushing brute content delivery into more efficient online channels (Hill 2012: 90–92).

HEIs will also need to adapt to the changing needs of learners in a ‘technological age’. Having grown up surrounded by new communication technologies, ever-present internet connectivity and fast-paced, continuous information flows, there is no doubt that today’s students stand out from previous cohorts. Most of them will be more technologically literate than their teachers and many will already be competent explorers of information on the internet. The implication is that to engage students, HEIs need to do more than deliver content and facts (Race 2011: 124). The fact that information is now so easily accessible means that teachers need to go beyond disseminating content to provide interactive discussions, critical engagement with the learning material, involved feedback, and close contact with themselves and fellow students.

Finally, while in the first instance MOOCs will simply be for voluntary leisure learning, there is clearly the potential for these courses to be accredited and count towards degree programmes. A candidate who successfully completes a MOOC could pay a small fee in order to take an assessment and gain credit that counts towards a formal qualification. The intention would be that students could take a series of credits at very low cost before transferring to a full-cost course to ‘top up’ their qualification. This could be a very powerful way of delivering part-time distance learning at no extra cost to the state. The accreditation could either be done by the HEI that provided the MOOC, or it could be overseen by the Open University, since it is hosting the FutureLearn platform and has extensive experience in credit-based distance learning.
We recommend that English HEIs should embrace the potential of new technologies by recognising credit from low-cost online courses so that they can count towards degree programmes. To make a start down this road we recommend that the Open University should accredit MOOCs provided via the FutureLearn platform so that they can count towards degree programmes offered by the OU itself and its partner institutions.

Recognising and developing the teaching profession

There is much excellent teaching in our higher education system – but we should be aiming to continuously improve. Evidence shows that teachers who are accredited or who have a postgraduate qualification in higher education teaching are rated more highly by students, are more sophisticated in their thinking about teaching, and have students who take a more sophisticated approach to their studying (Gibbs 2012: 16). Despite this, only one-fifth of academics in England have undertaken accredited training through the Higher Education Academy (HEA).  

One of the major problems in the system is that academics face strong incentives to focus on research activity rather than teaching, especially in the research-led institutions. They are largely selected and rewarded on measures related to research, such as the amount of research income they have generated or the number of articles they have published in refereed journals. Few would argue with the idea that teaching in higher education should be research-led, and that it is beneficial for students to be taught by people who are leading researchers in their field. However, there is a sense in which the focus and funding given to research has diverted attention away from the importance of teaching.

Nevertheless, there are a number of case studies of good practice. For example, Loughborough University has introduced a probation programme for all new academic staff, which requires them to undertake training in teaching methods. In Australia, the University of Sydney has created a parallel career path for academics who want to specialise in teaching rather than research, creating promotion and management opportunities on this career path that are equivalent to those available to academics focusing on research.

The HEA has also sought to highlight the value of attaching greater importance to teaching in higher education. It has put forward seven recommendations to improve the status of teaching and learning in HEIs and to improve strategies for rewarding and recognising such activities (HEA 2009: 22):

- using rewards for teaching that academics understand and value – here, promotions and confirmation of appointment are the most important aspects of reward
- establishing definitions of good teaching

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11 Interview with Prof Craig Mahoney, chief executive of the Higher Education Academy, January 2013.
• recognising university teaching as a profession in its own right, for instance, by making a university teaching qualification, or appropriate experience, a prerequisite for tenure and promotions
• embedding the evaluation of teaching in everyday academic work
• strengthening leadership for good teaching – good leadership at every level should be exercised to support the reward and recognition of teaching activities
• treating good teaching as a collective as well as individual responsibility
• using quality management levers to speed up progress. Coherence between a university’s mission, its quality management process, and its strategies for recognising and rewarding good teaching are not always apparent. Formal monitoring of reward and recognition for good teaching practice via an institution’s quality assurance process is essential.

To recognise and develop the teaching profession, the Commission recommends that all universities should follow the example of those that have created an established career path for academics who want to focus on teaching. This career path should have equivalent progression opportunities, pay and reward as are offered to staff on a research path. The Commission also recommends that all academic staff who undertake teaching should receive training in teaching and assessment as part of their probation period.

5.3 Building a collaborative and interconnected higher education system
Typically, successful education systems balance the benefits and pitfalls of both competition and collaboration. Competition provides for accountability and efficiency, but it can also lead to fragmentation and incoherence. Collaboration provides mutual support so that weaker performers can improve, facilitates learning between autonomous actors, and helps reduce costs through efficiencies of scale. At the same time, it can – at its worst – lead to a tolerance of weaker providers, if there is insufficient accountability and challenge. Both approaches – competition and collaboration – are vital to enhancing innovation and improving performance (Fullan 2010).

Two areas where we believe greater collaboration between HEIs is required is to help students enter and transfer around the system and to secure and deploy research funding.

Helping students to enter and move around the system
The English higher education system is organised around an assumption that most students enter the system via A-levels and go on to complete a full-time first degree. However, this is not the case for many learners who do not have A-level qualifications or are entering higher education after
several years on the job market. To cater to a wider group of people and their diverse needs, the higher education system needs to become better at delivering flexible, lifelong learning and retraining opportunities. And to do this, otherwise-autonomous institutions need to collaborate.

First, collaboration has a strong track-record of helping disadvantaged applicants to access the system. Aim Higher was a national programme that established regional collaborations with the goal of raising aspirations and providing advice and support to young people who had not traditionally gone into higher education. The scheme was scrapped in 2011.

Since its abolition, the lack of collaboration around outreach work has led to a fragmentation and geographical unevenness in the delivery of access work. The result is that some schools and colleges receive no support, while most of those that do receive support learn only about specific HEIs rather than the full range of opportunities on offer. Another disadvantage is that HEIs have tended to focus only on young learners from disadvantaged backgrounds at the expense of other groups, such as looked-after children, people with disabilities and mature learners (Atherton 2012).

Second, greater collaboration is required to enable students to move between institutions. There are several benefits associated with having a better functioning credit accumulation and transfer system in higher education:

- It makes the higher education system more flexible, responsive and accountable to students.
- It enables lifelong learning, by making it possible for students who have discontinued their studies to re-enter university without repeating all of their previous learning and paying the fees to do so. It is also less costly for the Student Loans Company, and therefore the taxpayer, if students can transfer credits from previous study rather than starting from scratch.
- It supports progression within the system. Students are able to transfer to an institution that best matches their abilities and ambitions, rather than stay in an unsuitable institution.
- It gives students more ‘ownership’ of the credits for which they have studied (and paid). According to this logic – in a system where higher education is seen as an investment in one’s future – students should be entitled to the credits that they have paid for, even if they discontinue their studies.
- The possibility of transferring credits makes ‘lower-cost’ routes to higher education, such as online learning or further education provision, more attractive and valuable, because students are able to take their credits to a more traditional HEI at a later stage in their degree if they wish to do so. This brings down costs, both for students and for the state.
Providing better opportunities for students to transfer their ‘purchasing power’ to another HEI if they are dissatisfied with their own institution’s provision could help to make institutions more accountable to their students.

There is currently very limited data on the extent to which credit transfers take place in England. HESA data show that approximately 10 per cent of entrants to first-year full-time undergraduate courses in 2011/12 entered with previous experience of higher education, but we do not know how many of those gained any form of advanced standing on their degree courses.\(^\text{12}\) Circumstantial evidence indicates that accreditation of prior learning is not widespread, except in limited parts of the sector. The Open University is a notable exception to this: it imports and exports more credit at the higher education level than the rest of the system combined (Watson 2012).

So why is credit accumulation and transfer not more widespread? It is not for lack of a framework for credit accumulation: the Higher Education Credit Framework for England is now in wide use across the sector. Of the 108 institutions that responded\(^\text{13}\) to a survey on the implementation of the framework in 2009, 100 confirmed that they operated arrangements for using credit; of these institutions, 96 stated that their credit arrangements aligned with the QAA’s framework (QAA 2009). We can conclude, therefore, that a majority of institutions in England now assign credits to their modules and to whole degree programmes according to a coherent framework.

There are clearly important cultural barriers: institutions do not necessarily have faith in the quality of other institution’s provision (which is closely linked, of course, to the hierarchical nature of our system), and there are concerns about the ‘shelf-life’ of credits, especially if they were acquired several years prior to the transfer request. Nevertheless, these problems are not insoluble: transfer-friendly institutions like the Open University have already established exemplary practice in doing so.

There are some important regulatory barriers that need to be overcome. In most cases, HEFCE will count transfer students as ‘new students’ despite their already having been counted at another institution. This limits the extent to which institutions can admit students at an advanced standing, since they are incentivised to make such students start from scratch (in order to maximise fee income). If these students were taken out of student number controls then there would be a greater incentive for institutions to accredit prior learning. The Commission proposes that HEFCE should exempt those students who transfer directly from one institution to another – or do so with a maximum of a one-year interruption to their studies – from student number controls.

\(^{12}\) HESA figures received through email correspondence with Professor Sir David Watson, April 2013.

\(^{13}\) The response rate was 83 per cent.
HEIs should be encouraged to establish transfer arrangements with other institutions, both regionally and nationally. The sector should learn from the Open University, which provides a good example of how transferability may work at a national scale by close collaboration and trust-building with a group of key institutions – in their case, 16 research-intensive universities (Open University 2012). As part of this strategy, institutions could form regional transfer schemes with a diverse set of nearby institutions. These schemes should have as their main purpose to support progression for talented, disadvantaged students.

In addition to this, institutions should enter into national transfer agreements to enable students to transfer beyond regions, particularly in cases where there are good personal or wellbeing reasons why a student might need to transfer, such as caring responsibilities, illness or disability. In order to avoid some of the cultural distrust that may ensue from institutions collaborating across regional borders, institutions could start out by making agreements between ‘similar’ institutions across the country, for instance, based on mission group affiliation or departmental linkages.

To encourage these agreements the regulator should include accreditation of prior learning as a good practice in access agreements. It should also set benchmarks for how many transfer students institutions should aim to admit.

In order to determine how to focus transfer initiatives in the future, HESA should collect data on the extent to which institutions admit transfer students and to what extent they accredit previous qualifications of students.

In the long term, we should move towards establishing a formalised credit transfer system, in which students know what is expected of them if they wish to transfer, and in which there is transparency and fairness in the value of credits.

Fostering research collaboration
The area in which institutions have been best at collaborating with one another has been on research. There are several reasons why collaborative research projects that engage a number of researchers at different institutions – as well as across different countries and continents – are now commonplace in higher education: 14

- the growing costs of scientific research, in particular the costs of scientific instruments and cutting edge technology
- the dramatically reduced cost of international travel and communication
- the logic of the academic exercise itself: advances in knowledge depend critically on interactions between researchers

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14 See Katz and Martin 1997 for further elaboration on these points.
greater specialisation in research, meaning that researchers need to work with others to achieve their objectives
• a greater emphasis, by funders among others, on the benefits of cross-disciplinary research
• in Europe, the greater role of the European Union in funding cross-national research collaborations.

Some institutions have taken research collaboration beyond collaborating on individual research projects to also collaborating at an institutional level. For example, the N8 Research Partnership is a partnership of the eight research-intensive universities in the north of England: Durham, Lancaster, Leeds, Liverpool, Manchester, Newcastle, Sheffield and York. Since it was formed in 2007, the partnership argues that it has managed to attract additional research funding to the north of England (N8 Research Partnership 2013). Similarly, the M5 Universities are a group of six (previously five) research-intensive institutions based in the Midlands – Birmingham, Leicester, Loughborough, Nottingham, Warwick and Aston – that work together to boost research collaboration and share expensive research equipment (M5 Universities 2013).

Other countries have gone further. For instance, France and Denmark have pursued an explicit policy of amalgamating universities in order to concentrate research resources (Labi 2011, Grove 2013). In a much more globally competitive world, such mergers or federations may become increasingly attractive as ways of achieving critical mass in key disciplines.

5.4 Ensuring strategic oversight

At the heart of current government policy lies the belief that the sector is best organised and driven by the aggregated choices of all participating students. We believe that it is right in principle that students are empowered through open data and transparency to make informed choices. We also believe that vigorous competition for students is important as a way of incentivising institutions to improve their offerings and to ensure the system as a whole is globally competitive.

However, the wider social benefits of higher education will not always be reflected in the private decisions of individual students. For example, it is possible that student tastes and preferences will lead to certain subjects being over- (or under-) supplied in different parts of the country. A certain degree of strategic planning by the state, through an independent regulator, is therefore required to ensure that national objectives are met. More widely, there is a role for regulation to ensure that universities are guided by the principles we outlined at the beginning of this report.

We argue that there is an important strategic role for government in the higher education system.
This is to achieve a number of objectives.

- **The provision of strategically important and vulnerable subjects:** Individual student choices will not necessarily reflect what is in the best interests of the country, in terms of the types of skills the economy needs to grow in the future. This is most obvious in the case of training public sector workers, where the state needs to take an overview of whether there are enough people qualified to become doctors, nurses, social workers and teachers. But it can also happen in less visible ways – for example, several institutions in a region may decide to stop offering a foreign language course because it is not deemed financially viable, leaving pockets of the country without provision in that subject. HEFCE currently mitigates this risk by providing grants for strategically important and vulnerable subjects (SIVS), but its capacity to do this may be eroded in the future given pressures on the public finances. There is a role for government in ensuring certain types of institution and study are promoted in particular parts of the country, just as it is important to ensure that the full range of academic subjects are offered somewhere in the UK.

- **Oversight of global competitiveness:** It is important that government keeps a close eye on the global competitiveness and reputation of England’s higher education system. This broad responsibility implies a number of specific things: that government monitors the impact of the immigration system on our ability to attract international students; that research funding is distributed selectively and competitively in the ways we have outlined; that government monitors whether our institutions have sufficient critical mass to compete globally, through facilitating collaboration and mergers; and that it ensures that quality is sustained through effective regulation.

- **Cost control:** Despite the increase in tuition fees, the Treasury continues to subsidise our higher education system substantially. The government has a duty on behalf of the public to ensure that this money is spent in a sustainable and responsible manner. Therefore, the government is always likely to want to determine the overall number of loan-funded places in the system.

- **Providing a failure regime:** As noted already, our higher education system lacks a formal failure regime. If institutions are struggling financially then, informally, government, through HEFCE, would normally seek to act. But with the changes to the funding system, HEFCE now lacks the level of resources that might be needed to rescue a struggling institution. What is most important is that vital local HEIs are not simply left to ‘wither and die’. There is a legitimate role for government, through the regulator, in facilitating mergers or collaborative federations between stronger and weaker institutions to enable the weaker institutions to survive and thrive.
• Ensuring universities help to expand opportunity: There is a vital role for government in ensuring that the right incentives are in place to ensure that higher education works to expand opportunity. This can come, for example, through the regulation of access agreements, or through the provision of financial incentives for selective institutions to recruit disadvantaged students, as set out in chapter 3.

• Oversight of institutional diversity: There is a proper role for the state in ensuring that the system as a whole encompasses a mix of institutions that, taken together, help to meet the country’s needs. Government should be supportive in the creation of a differentiated higher education sector, in which institutions are incentivised to play to their strengths and pursue different missions, rather than a sector in which all institutions are encouraged to pursue the same model of excellence. For example, we have set out above suggestions for how we could carve out a distinctive space in the system for further education colleges specialising in the provision of employment-focused higher education – specifically through a revival of the polytechnic status.

A better relationship between universities and government

Clearly, the system demands a strategic role for government. However, we also know that higher education systems perform best when universities maintain a well-insulated autonomy from the state. Universities are public institutions, not state institutions, and this is widely regarded as one of the reasons for the historical success of our system (Williams et al 2012).

Lately, concerns have arisen around government efforts to micromanage the higher education sector. For example, requirements in the Research Excellence Framework that departments demonstrate ‘impact’ have caused controversy, with some seeing it as a threat to academic freedom. But the regulatory burden is also an outgrowth of the complex thicket of regulatory bodies that oversee the system. The primary regulator is HEFCE, which devolves this responsibility to the QAA, although OFFA and the Office of the Independent Adjudicator (OIA) also provide some degree of external regulation. This results in high transaction costs for institutions, and means that they have to deal with a complex array of different bodies. It can also result in institutions receiving mixed messages, because the different regulatory bodies have different aims and objectives.

More concern surrounds the effectiveness of regulation. The QAA audits the systems and processes that institutions have in place to assure quality, but it does not make an assessment of the ‘actual’ quality of provision with on-the-ground inspections. The result is a highly bureaucratic audit process, whereby the QAA investigates the procedures that universities have in place on paper rather than the quality of what they actually provide.
A final concern is that regulators should have greater freedom of action – at times in the last decade they have been too closely directed by government and insufficiently protective of institutional autonomy. The relationship between Whitehall and the regulatory landscape should be recast so that regulatory bodies are working at arm’s length.

In order to achieve these objectives, we need a smarter regulatory system that can provide the sector with strategic direction, while protecting the institutional autonomy that is at the heart of our higher education system. A new system of regulation should have the following features:

- simpler (involving fewer organisations and transactions)
- a better judge of quality (assessing outcomes on the ground, rather than simply whether procedures are in the place)
- able to protect the autonomy of the sector (free from excessive interference from government)
- more robust (the expansion of competition between institutions creates the need for better regulation).

The Commission recommends that a new, single higher education regulator is created, based on expanding HEFCE to incorporate QAA and OFFA. This will reduce bureaucracy by simplifying the relationships between universities and government.\textsuperscript{15}

The revised remit of HEFCE would be:

- to respect and defend the valued autonomy of our HEIs
- to maintain the strength and dynamism of England’s research base (including implementation of the Research Excellence Framework)
- to safeguard the global reputation of English higher education
- to ensure that the best possible use is made of public funds in those institutions to which it gives direct grants
- to contain costs by managing student numbers in those institutions that are entitled to recruit students supported by the student loans system
- to act as a champion for students, to ensure that their higher education experience is of a high quality and to regulate market entry to ensure that all providers of publicly funded higher education meet certain minimum standards
- to collaborate with the HEA and NUS to spread best practice in teaching
- to further the national interest by ensuring that strategically important vulnerable subjects are supported

\textsuperscript{15} We propose that, as an independent complaints agency, the OIA should remain a separate body.
• to support a robust role for higher education in contributing to the strength of national and regional economies
• to provide a failure regime, by monitoring the financial health of institutions and by stepping in to ensure failures are dealt with in a responsible manner and in the nation’s interest. This could involve, for example, facilitating mergers or federations of universities where necessary
• to promote and safeguard fair access to higher education for lower income and other under-represented groups.

The new regulator should be established by royal charter, and it should report to parliament – rather than the government of the day – on standards in higher education. This would give it some autonomy from government tinkering, while enabling it to focus on the long-term quality and health of the sector.

**For-profit providers**

The government’s plan to introduce more for-profit players into the higher education sector has faced substantial opposition. Critics have argued that the profit motive runs counter to the civic and educational purposes of universities. Moreover, there have been criticisms that allowing private companies to recruit students who receive student loans would effectively lead to a distribution of taxpayer money directly into shareholders’ dividends.

In June 2012 the government announced that it will go ahead with the accreditation of higher education courses by private providers, and that students attending these institutions will qualify for governmental student loans (Matthews 2012). However, following concerns raised in the aftermath of the white paper’s publication, universities minister David Willetts also made clear that private providers would be subject to similar controls on student numbers and a similar quality assurance regime as the rest of the sector (ibid).

We believe that for-profit providers can play a valuable role in our system of higher education, by filling in gaps in particular niche areas (notably in occupational disciplines such as business, management, accounting and law) and by providing innovation in modes of delivery.

However, it is vital that we avoid the fate of the US system, where too many poorly regulated providers have entered the system, encouraging students to take on excessive debts while failing to provide decent quality provision. Students, the economy and the reputation of our system would suffer if this were to happen. Therefore, all those licensed to provide publicly funded higher education should be subject to the same rules in terms of market entry and quality control.

Moreover, while we have no problem with for-profit providers entering the system and admitting students with subsidised loans, we believe
that all providers seeking degree-awarding powers must pass strict quality regulation, and that such powers should not simply be able to be acquired or purchased via the takeover of existing institutions.

We should be very careful that the title of ‘university’ is not downgraded. The title has historically denoted a very particular type of institution, oriented towards serving the public good rather than any private interest. While we do not support removing any existing titles, we do think that in the future providers should meet a clear public benefit test before they can take the university title. It is unlikely that for-profit providers specifically will meet the high threshold required to be described as universities if their overriding duty is to private shareholders, not the public (or ‘publics’ – their students, their staff, the nation, and the wider international community).\(^\text{16}\)

**Degree-awarding powers should only be given to those institutions that exceed demanding quality thresholds, such powers should never be bought or sold, and the university title should be reserved for institutions oriented towards the public good.**

The same framework for market entry and quality assurance should apply to all providers of higher education. Our proposed new regulator, based on expanding HEFCE, would regulate access and assure quality on three different levels:

- All institutions offering a recognised higher education degree would have to achieve a quality threshold and provide students with access to a dispute resolution process.
- All institutions in receipt of public funds would need, in addition, to publish more detailed information about their courses and outcomes; give students access to dispute resolution via the OIA; comply with the quality framework; and, if they intend to charge fees of more than £6,000, have an access agreement approved by HEFCE. Their provision would fall within student number controls and the tuition charge cap. HEFCE will be expected to monitor these providers, address signs of failure and agree recovery arrangements. Should an institution fail to meet any of these requirements, despite having been given time to take remedial action, their access to student support finance could be suspended or stopped.
- Non-profit institutions will, additionally, be able to access grants from HEFCE to fund those additional costs and public policy priorities that cannot be met by graduate contributions alone.

\(^{16}\) Note that this would not affect an institution like the University of Buckingham, which is private in the sense that it does not receive students subsidised via the student loans system but is a non-profit institution.
5.5 Conclusion
We need to shift from having a higher education sector to having a higher education system, which evolves and is self-improving. The cornerstones of that system should be:

- students empowered through information to make choices between institutions
- vigorous competition between institutions in order to raise their game and secure the competitiveness of the system internationally
- an explicit commitment to excellence in teaching, a greater recognition of the teaching profession, and engagement of students as active partners in the improvement of teaching and learning
- collaborative arrangements that enable institutions to better support students and pool risk and resources
- a clearer regulatory framework, with a single principle regulator, to safeguard the public interest in areas such as value for money, quality of teaching and research, strategically important subjects, institutional diversity, economic contribution and fair access.
6.1 Weathering the storm: higher education funding in the next parliament

**Investing in the future**

This report has set out the case for investing in the nation’s people and research base. These are national assets that will drive future growth and help to build a thriving society. High-quality education and research are the foundations on which future prosperity will be built. If they are not protected and nurtured, the productive capacity of the country will be reduced, and we will not get the most out of our economy, society and culture.

The importance of investing in higher education has been recognised by Britain’s competitors. They are investing a considerable share of their national resources into expanding high-quality tertiary education and conducting research and development. The UK currently spends 1.3 per cent of GDP on tertiary education, compared to 2.6 per cent in the US, 2.5 per cent in Canada, and 1.9 per cent in Sweden and Denmark (OECD 2012a). This means our competitors are spending nearly twice the proportion of their national wealth on tertiary education that we are. A similar pattern emerges in the field of research and development. The UK spends just 1.8 per cent of GDP on R&D activity, compared to 2.8 per cent in the US and well over 3 per cent in Sweden, Finland, Japan and Korea (OECD 2011b).

These countries have recognised that actively investing in education and research is a good way to secure their future success. Over the long term, Britain should seek to match this level of investment. It will help us to compete with other countries, by raising the productivity of our businesses and public services, as well as making the country a better place to live.

**Future spending constraints**

While the nation’s long-term goal should be to increase investment in higher education, the next few years will clearly be extremely tough for the government finances. The country is suffering the aftershocks of a profound economic crisis, and the slow pace of economic recovery is placing unprecedented pressure on public spending. As a result, government departments have been asked to make significant spending cuts, and higher education is not immune from this.
In October 2010, the government set out its plan for consolidating the public finances, which saw the majority of departments being asked to make substantial spending cuts. Over the course of this parliament, BIS will see its budget cut by a quarter (see table 6.1). In passing on these cuts, BIS decided that it would give relative protection to further education and apprenticeships, while asking higher education to absorb the lion’s share of the spending reductions. The funding allocated specifically to higher education was set to fall from £7.1 billion in 2010/11 to £4.2 billion in 2014/15, a cut of 46 per cent in real terms. This figure excludes government funding for science and research, which is treated separately on the BIS accounts. Recognising the importance of science and research to the economy, the government decided to hold this funding stream constant. It should be noted, however, that the funding for science and research was only held flat in cash terms, which equates to a 9 per cent cut in real terms once inflation has been taken into account.

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The most obvious result of these spending cuts was the decision to reduce government grants for higher education teaching, and to replace that funding with higher tuition fees for students. In essence, the government shifted some of its current spending commitments onto the next generation of graduates, who will have to repay higher tuition fees once they have completed their studies. As a result of this change, BIS was able to cut its budget while protecting the tuition income flowing to HEIs. The latest grant letter from the government to HEFCE shows that the recurrent grant for teaching will be cut by nearly 50 per cent between 2012/13 and 2014/15, from £3.8 billion to less than £2 billion (BIS 2013b). This income will be replaced by an equivalent rise in tuition fee income.

The government had hoped that by replacing teaching grants with higher tuition fees, HEIs would be able to weather the storm of spending cuts. They assumed that economic growth would have returned over the course of this parliament, meaning that there would be no need for further cuts to the BIS budget. As a result, HEIs would be relatively well protected from the brunt of spending cuts, at least in comparison to other public bodies, such as local authorities, which have witnessed huge upfront cuts in their income.
However, the pace of economic recovery has been much slower than the government predicted, and public spending cuts are therefore going to be extended well into the next parliament. Table 6.2 shows that over the next six years BIS will have to make a further cut of £2.2 billion in its budget, assuming the current pace of deficit reduction is maintained. This is the equivalent to an additional real-terms cut of 22.8 per cent. If the government continues to protect science and research spending by holding it flat in cash terms then the rest of the BIS budget will have to bear the brunt of these additional cuts. As a result, our projections show that non-science and research spending is likely to be reduced by nearly one-third. If BIS decides to pass a cut of this size on to higher education, the sector could expect to see its budget cut by £1.16 billion over the course of the next parliament. Even if the government decided to slow down the pace of deficit reduction or raise taxes, it is clear that substantial spending cuts will have to be made in order to put the public finances on a stable footing. There is more pain to come.

Table 6.2

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Note: Projections are based on the government’s planned departmental expenditure limits to 2017/18, after which they are expected to increase with inflation. The projections assume that the balance of spending between government departments remains the same as at present.

The scale of the government’s austerity programme is far larger than is commonly recognised by higher education leaders. BIS will be asked to make a 22.8 per cent cut over the course of the next parliament, in addition to the cuts it has already made. Higher education institutions were relatively well protected from spending cuts over the course of this parliament, as their lost income was replaced by higher tuition fees. With tuition fees already extremely high by international standards, this option will not be available next time around. The sector faces the prospect of profound upfront cuts in income for the first time in over a decade.

Protecting a national asset

The immediate challenge facing higher education is therefore to navigate its way through another period of deep public spending cuts. It is essential that this is done in a way that does not do lasting damage to one of the nation’s most precious assets, and that leaves the sector well placed to flourish in the future. The aim should be to undertake spending cuts in such a way as to protect the long-term productive potential of our economy and society and to put in place strong foundations for future growth. Key to this should be continuing to ring-fence the
science and research budget in cash terms. As chapter 3 set out, higher education research plays a critically important role in innovation and regional economic growth, and it therefore holds the key to national economic recovery. Even holding the science and research budget flat in cash terms means it will have faced a real-terms cut of 8.7 per cent between 2010/11 and 2017/18 – asking it to make a deeper cut still would risk its ability to help drive future innovation and growth.

As well as protecting the science and research budget, there are other areas of spending that should be a priority for BIS. A supply of skills is a key ingredient for economic growth, provided it is matched with innovation and job creation in the private sector. Chapter 3 identified that England faces a particular shortage of intermediate technical skills and argued that this could be lowering productivity in key sectors such as health, manufacturing and the creative industries, as well as hampering efforts to rebalance the economy. Vocational education and training should therefore remain a priority for the department.

Similarly, the government must not row back on its commitment to widening participation. Providing resources for widening participation enables HEIs to fund outreach and retention activities that help to raise participation among young people from poorer families. In chapter 4, we set out how existing resources in this area could be retargeted to create a student premium.

Some commentators have argued that one way to save money would be to cut the proportion of young people going into tertiary education. They believe that more young people should go straight into work after leaving school (see for example Heath 2013). A cursory glance at the labour market shows that this view is misguided. Over the last few decades Britain has witnessed the collapse of its youth labour market, and there are nearly 1 million young people out of work. Sending a greater number of school-leavers into this environment would simply exacerbate the problem and put more strain on the welfare system. When a young person is unemployed for more than a year it has a permanent ‘scarring effect’ on their lifetime earnings, as well as negatively impacting on their health (Bell and Blanchflower 2010). On the other hand, if young people enter tertiary education and training, they are able to improve their prospects of finding a job and leading a healthy life. A government concerned about investing in the next generation would maintain the proportion of young people entering higher education.

There are therefore certain areas of spending – such as research, vocational education and widening participation – that should be priorities for the government over the next few years. Giving relative protection to spending in these areas would help the sector to emerge from a period of fiscal consolidation with its foundations intact, well positioned to flourish in the future.
Difficult decisions
In return for giving relative protection to some areas of spending, the higher education sector must be prepared to make savings in other ways. Making upfront savings is difficult in higher education because the government has already shifted a large amount of its expenditure into subsidising student loans. This means the state’s contribution to tuition is now made several years down the line, when it writes off unpaid student loans and subsidises their interest rate. This was a short-term measure designed to help BIS make spending cuts in this parliament, but the net result is that the department has very little room to make any upfront savings in the next, since most of its costs have been deferred in this way. Changes to the student loan system may save the government money in the long term, but they cannot be used to make spending cuts in the next few years. As a result of this trick to reduce the deficit in the short term, important areas of the BIS budget, such as research and widening participation, have been left very exposed to cuts in the next parliament.

Despite this problem, there are ways to help limit the cost of higher education to the government. These could be implemented in return for giving relative protection to the key areas of spending identified above. At a time of spending cuts, it is fair that both HEIs and students share some of the burden. What follows is a range of options for reform.

Holding teaching grants and tuition fees flat in cash terms
To date, HEIs in aggregate have had their income relatively well protected from spending cuts. It is therefore reasonable to expect them to achieve some short-term efficiencies. By holding the tuition fee cap flat at £9,000, the real value of this fee would decline over time as a result of inflation. For example, if the fee was held at £9,000 until 2017/18, its real-terms value would decline by 9 per cent, meaning it was worth £8,190 in today’s prices. This would relieve some of the burden on students and graduates. Similarly, in 2014/15 the government expects to spend approximately £1.96 billion on teaching grants. If these were to be held flat in cash terms until 2017/18, the government could make a 5 per cent saving, worth £104 million.

The way in which institutions can deliver efficiencies will vary depending on their specific context. Institutions could ensure they maximise additional income through their facilities throughout the year. They could also innovate in the way they deliver course content by making use of new technology or experimenting with shorter and more intensive courses.

More savings could come through procurement. After staff, the biggest area of spending for HEIs is on goods and services, which amount to nearly 45 per cent of their total spending. Yet in 2010/11, only 10 per cent of non-staff expenditure was channelled through collaborative procurement arrangements (Petford and Davies 2013). As the Diamond
review (2011) made clear, HEIs could make better use of procurement consortia and manage their suppliers more effectively to drive down costs. Collaboration could also hold the key to reducing costs in other areas. We have already seen the growing use of doctoral training centres, which enable universities to pool their resources to provide opportunities for postgraduate study.

Create £5,000 ‘fee only’ degrees
As argued in chapter 3, the sector should explore ways of offering more ‘low-cost’ places to ensure that we can continue to expand opportunity while money is tight. We know that many potential students may wish to study in their local area, live at home, avoid taking on any debt, and combine their studies with paid employment in order to cover living costs.

The government should therefore incentivise the creation of courses that meet the needs of these potential students. It could do this by creating a pool of additional student places which are explicitly designed to be for £5,000 ‘fee only’ courses. Higher education institutions could apply to be given these places, provided the courses meet this criterion. These places would be attractive to institutions that wished to expand their student numbers, or were struggling to fill their full-cost places. These courses would represent a very low cost to the state, as it would not have to pay any maintenance grant, national scholarship programme or maintenance loan subsidy, the amount it has to pay to subsidise fee loans would be reduced. Taken together, this could amount to a long-term saving to the state of over £10,000 per student, compared to the average ‘full-cost’ place.

Use technology to expand low-cost places
Technology could provide the key to unlocking low-cost expansion. As argued in chapter 5, one way of expanding opportunity at low cost would be for universities to accredit low-cost online courses, such as those provided through FutureLearn. To start with, the Open University could accredit MOOCs towards its own courses and then towards those of its partners.

Make greater use of employer-sponsored courses
Most commentary on student fees assumes the cost will be shared between the state and the graduate. This ignores the important role that businesses and employers can also play in funding higher education. Employers benefit greatly from higher education, especially where students are studying towards professional certificates that are directly applicable to the workplace. Employers are currently sitting on large cash reserves, which could be invested in training their staff. As we set out in chapter 3, employers could be incentivised to support more employees through higher education by reducing employer national insurance contributions for any employees who are undertaking accredited training.
Students who are currently funded by employers may count towards an institution’s number controls if they are not studying on a ‘closed course’. There is a danger that students who are currently funded by employers, and therefore represent little or no cost to the state, are taking up places that could be used by others. Higher education institutions should be able to treat these students ‘off quota’ so that they do not deprive other students of a chance to attend higher education. Any student who has had their tuition and maintenance funded by an employer, and is therefore not drawing on state support, could be exempt from an institution’s number controls. This would free up places for others who are currently excluded as a result of the cap on student numbers.

**Bank savings from demographic change**

While the higher education sector must try to expand the number of low-cost places it offers, demographic change is likely to generate some natural savings for the government on full-cost courses over the next six years. As a result of changes in the birth rate, by 2021 there will be 217,000 fewer 18–21-year-olds in England than there are today (see figure 6.1). This could lead to a 4–8 per cent decline in the absolute number of young students in the system, depending on the socioeconomic composition of this group. This means that between 2014/15 and 2020/21 the government will generate a saving of £1.5–3 billion on teaching grants and maintenance grants over a seven-year period.\(^{17}\)

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\(^{17}\) We estimate that between 2014/15 and 2020/21 the government will spend approximately £38.2 million on teaching grants and maintenance grants. A 4–8 per cent decline in this budget would lead to a saving of £1.5–3 billion over that time period.
The government should maintain the proportion of 18–21-year-olds entering higher education on a full-time basis. However, it should be prepared to see the absolute number of students fall in the short term, before picking up again in 2020. Any expansion in this period must be met from low-cost courses or vocational education, rather than ‘full-cost’ higher education provision.

Reduce the cost of grants to students who live at home

The government currently offers a range of maintenance support to help full-time students with their living costs. This is the right thing to do, since high upfront living costs could prevent some people from participating in higher education, or could lead to students living in hardship.

However, there is an anomaly in the way this support is currently awarded. Students who live at home are eligible for a lower level of maintenance loan than students who opt to live away from home, since they are likely to incur lower living costs. But this principle does not apply to maintenance grants: students are eligible for the same level of maintenance grant regardless of whether or not they are living at home, despite the same variation in actual living costs. The government could investigate whether a lower level of maintenance grant should be awarded to students who live at home.

Reduce the cost of maintenance support to the state

Figure 6.2 shows how maintenance support is delivered through a mixture of grants and subsidised loans, with students from poorer households being eligible for larger grants, while those from wealthier households have to take out more in loans.

Figure 6.2
Current student support maintenance entitlements, loan/grant split according to income

Source: BIS 2010
Both the grants and the loans represent a similar cost to the government, but in different ways. The grants represent an upfront cost to the government averaging £4,212 per full-time student over the course of their degree. The subsidised loans also cost the government, at an average of £4,345 per average full-time student, but the government only incurs this cost later on, once the student has not repaid their full loan. The government could therefore make short-term savings if it reduced the level of maintenance grant and replaced it with a higher maintenance loan. However, this would generate a long-term saving to the Treasury only if it also changed the loan repayment terms to ensure it recouped a larger share of the loan. If the government switched to offering more maintenance loans in place of grants without altering the repayment terms of the loan, it would simply be deferring the cost to fall on future taxpayers.

Beyond the storm
The previous section argued that the higher education sector must be prepared for spending cuts over the next six years. It identified ways in which these cuts could be made without damaging the foundations of future growth and prosperity. These measures, while painful, would enable the sector to emerge from a period of deep fiscal consolidation well placed to grow in the future.

When the country’s finances are on a more stable footing, the government will be in a better position to invest in higher education. This will be essential in order to correct for a period of deep spending cuts which, in the case of science and research, will have lasted for nearly a decade. The government should therefore make a long-term commitment to increase real-terms spending on science and research after 2017/18, once the structural deficit has been eliminated. The science and research budget is expected to be £4.6 billion in today’s prices in 2017/18. The Commission recommends that after 2017/18 the government commits to increasing the science and research budget above inflation over a 10-year period. If the government increased the budget by 1 per cent a year above inflation for 10 years then by 2027/28 the government would be investing £6 billion in science research (or £4.7 billion in today’s prices). Nonetheless, even under this scenario, spending on science and research would not recover to today’s level until 2024/25.

6.2 Creating a sustainable funding system for the future
While the immediate challenge facing higher education is how to navigate the next round of spending cuts, this must not distract us from the equally important task of creating a funding settlement that will support the sector in the long term. Without a sustainable funding system, we risk storing up costs for future generations and leaving them a poorer Britain.
Soon after winning the general election, the Coalition government announced its plan to reform the higher education funding system. In the face of fierce protest from students and young people, it committed to nearly trebling the cap on tuition fees to £9,000, as well as making changes to the repayment terms of student loans, increasing maintenance support, and reducing government grants for higher education teaching. Lying behind these reforms was a desire to cut public spending and reduce the deficit in the short term, but they were also underpinned by a principled desire to reduce central planning and increase competition in the sector.

According to the government white paper, these reforms were intended to ‘put higher education on a sustainable footing’ (BIS 2011). It argued that the reforms enabled the government to make spending cuts while protecting income for HEIs over the long term and not damaging social mobility. Despite these claims, there are concerns that the current funding system is not well designed to secure the long-term future of higher education (Barr 2012, Thompson and Bekhradnia 2012). This chapter assesses the current funding system and proposes a series of possible reforms.

**Guiding principles**

Before making an assessment of the current higher education funding system, it is necessary to set out the principles against which it should be judged. The Commission believes that any funding system should be based on the following principles:

- **It is fair to students across social classes and modes of study.** A funding system must not exclude students based on their ability to pay for tuition, their ability to maintain a basic standard of living, or their chosen mode of study.

- **It is sustainable to the public purse.** A funding system should not defer unnecessary costs on to future governments.

- **It supports institutional autonomy.** A funding system should protect the autonomy of HEIs, where possible keeping them at arm’s length from the government.

- **The cost of tuition is shared between graduates and the state.** Given there are both public and private benefits to higher education, the cost should be shared between graduates and the public purse.

- **It does not detract from funding research.** A funding system should not crowd out finance for other key activities in higher education, such as research.

- **It is fair across the generations, when combined with other tax and spend decisions.** A funding system should not place undue burden on a particular generation, when combined with other forms of state support.
• **It pools risk across graduates and HEIs.** A funding system will inevitably generate the risk of low returns on some of the original investment. This risk should be shared across graduates and institutions.

• **It does not unnecessarily restrict the supply of student places.** A funding system should not artificially restrict the number of student places that are available, as this could prevent people from benefitting from access to higher education.

**Strengths of the new funding system**

Last September, the first generation of students started higher education under the new student support system. The key features of this system are summarised in the boxed text.

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### Key features of the new student funding system

The most notable aspect of the new funding system is the increase in tuition fees. All HEIs are able to charge a basic fee up to £6,000 for full-time undergraduate courses. If institutions commit to spending additional resources on widening participation, they are able to charge up to £9,000 a year.

Under the previous system, the state provided upfront support for some tuition costs in the form of teaching grants. These have been substantially reduced under the new system, because HEIs are expected to get the majority of their income for teaching through student tuition fees. This has enabled the government to reduce a lot of its upfront expenditure on tuition.

Like the previous system, income contingent loans are available for all full-time home students to cover their tuition fees and to help with living expenses. The government therefore continues to make a considerable outlay on student loans, although it expects to get some of this money back in the form of graduate repayments. Graduates repay their loans through the tax system, being charged 9 per cent of any income earned above £21,000 a year. The government heavily subsidises the interest on student loans and writes off any unpaid debt 30 years after graduation.

See the technical appendix for a more detailed explanation of the student support system.\(^\text{18}\)

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While it is too early to make a comprehensive assessment of the new system, it is possible to identify its main strengths and weaknesses. By assessing each strength and weakness in turn, it is possible to make a holistic assessment of the system.

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The main strength of the new system is that it has increased the resources flowing into higher education, enabling institutions to maintain or enhance their level of provision. The majority of HEIs have raised their tuition fees to a level that more than compensates for the loss of government teaching grant. The government had reduced its teaching grant on the expectation that the average tuition fee would be around £7,500. However, the average fee has turned out to be over £8,100, and this may increase further in the coming years as more institutions opt to set their fee at this level. In aggregate terms there has been a small increase in investment in higher education teaching as a result of these reforms.

Second, the new system continues to provide financial support for students who would otherwise be unable to meet the cost of tuition. The use of income-contingent loans is a good way to overcome this barrier, as it enables students to borrow money that they have to repay only later in life, once they can afford to do so. This helps to remove the constraints on students from poorer families participating in higher education. Early indications suggest that full-time students from poorer families have not been disproportionately affected by the rise in tuition fees (UCAS 2012).

Third, it maintains institutional autonomy over funding. Institutions receive a large swathe of their income in the form of tuition fees, and are therefore not tied to the Treasury for their funding. This protects them from short-term political interference or changing spending priorities, allowing them to make decisions that are in their own long-term interests.

Fourth, the new system is based on a clear principle that the cost of higher education should be shared between the state and the student. The student contributes in the form of tuition and maintenance fees, which are repaid through the student loan system. The state contributes by providing some upfront teaching grant to HEIs, heavily subsidising student loans, and providing funds for widening participation. The point at which these contributions are made varies across the lifetime of the loan – some are upfront contributions by the government, while others are deferred. The exact share of the cost that is born by each student varies according to their earnings later in life. Some well-paid graduates will end up paying the entire cost of their tuition, while many others will not. The modelling presented in section 6.3 below suggests that when all the different payments and subsidies are taken into account, the whole cohort of graduates will collectively contribute 21.5 per cent of the total cost of higher education tuition, with the state making up the rest.

Ten weaknesses of the new funding system
As well as having strengths, the new funding system has a number of weaknesses. These weaknesses are not well understood in public debate, but they could have very serious consequences for the future of our higher education system.
The first weakness is that the new funding system has not delivered sufficient numbers of part-time and mature students. Chapters 3 and 4 have outlined why it is important to provide opportunities for people to access higher education throughout their adult life. This is especially important at a time of economic restructuring, as people need to be able to retrain to adapt to the new economic climate. Part-time study is also a useful vehicle for upskilling the workforce in key areas such as health and early years. It is, therefore, extremely concerning that the introduction of the new tuition fee regime appears to have precipitated a 40 per cent decline in part-time students, with many students unable to access loans and seemingly put-off by the high upfront cost of a degree.19

A second concern is that the student loan system may not be sustainable for the government finances in the long term. The government is making a huge outlay on student loans, which it is able to avoid counting towards the deficit because it expects to receive the money back in the form of graduate repayments. The only long-term cost to the government is deemed to be the amount that it expects to write off in the form of unpaid loans or interest rate subsidies – this is known as the ‘RAB charge’. The government first estimated that the RAB charge on the new loan system would be 30 per cent – in essence it predicted that it would have to write off 30 per cent of the total value of loans. However, it has subsequently had to increase this estimate to 34 per cent, and the modelling we present below suggests that in reality it is more likely to be around 39 per cent. The government has therefore underestimated the amount the taxpayer will have to pay to subsidise student loans.20 This problem will remain hidden until the loan repayments from this cohort of students start to come in to the Treasury over the next 30 years. At that point, the government will have to cover the shortfall in loan repayments. This means that future taxpayers could have to pick up the bill for the unexpected cost of today’s student support system. This has led some commentators to describe the new system as akin to a ‘dodgy private finance initiative’, where the government spends money now but stores up the costs for future taxpayers in the form of unpaid loans (Barr 2012). While the low cost of government borrowing on the gilts market may help to mitigate the worst effects of this problem in the short term (Shepherd 2013), it is clear that the high RAB charge is storing up longer-term problems for the government and preventing BIS from issuing more student loans.

Third, in a related point, the generous subsidy for student loans is placing undue pressure on other areas of public spending. The government has decided to provide the vast majority of its support for higher education tuition in the form of loan subsidies. These subsidies do not provide an

19 See section 4.2 for a detailed discussion of the decline in part-time study.
20 For a detailed explanation of why the government’s estimated RAB charge is too low, see the technical appendix, available separately (see note 18).
immediate benefit for students – rather, they help to relieve the cost on graduates later in life when they are employed. The government has therefore opted to invest its resources in helping out graduates with their loan repayments. This could be deemed a questionable use of resources at a time when the government has made cuts to more direct forms of support for young people, such as the education maintenance allowance, Aim Higher and higher education teaching grants.

A fourth concern is that the new student support scheme could place more pressure on the BIS budget in the next few years. If the government realises that it has underestimated the long-term cost of the student loan system to the Treasury then it will be forced to increase the RAB charge. Our modelling suggests it will have to increase the RAB charge from 34 to over 39 per cent. In order to compensate for this increased long-term cost, the Treasury will require BIS to make an equivalent saving in its current expenditure. A higher RAB charge will therefore add more pressure on BIS to cut essential current spending in the short term, in areas such as science and research.

Fifth, the design of the student loan system means the government will have to ration the number of student places available in the system. As we have argued in chapters 3 and 4, it is important both to provide a supply of high-skilled people for the economy and to open up places for students from disadvantaged backgrounds. Rationing the number of places available in higher education would be detrimental to both these aims. It is particularly harmful to students from disadvantaged backgrounds, who are more likely to be crowded out from higher education if there is a shortage of places. In theory, a well-designed student loan system could help to create more places in higher education, by providing additional resources for the sector to expand (Barr 2012). This was the logic behind the introduction of tuition fees under the previous government: they were additional to government expenditure and therefore enabled more places to be created and more people to benefit from higher education. However, the new system adopts a different logic – it has simply used tuition fees to replace government spending. Given the state subsidises student loans so heavily, it has not been prepared to issue more loans. We have already seen attempts to restrict the number of students in the system through the reform of institutional number controls.

Sixth, the student loan system may exacerbate problems with fair access to postgraduate study. As the number of people taking undergraduate degrees has increased, so the value of having a postgraduate qualification has increased in terms of ‘standing out’ in the labour market. Taught master’s courses are becoming an increasingly important gateway for entry to certain professions. However there is limited state support for people to enrol on these courses, which leaves many graduate students having to take out a private bank loan or rely
on family support. Even before the introduction of the new funding system there were concerns that students from less-advantaged families were unable to access master’s courses. These concerns have been exacerbated following the introduction of the new funding system, prompting fears that students who take on such large amounts of debt as undergraduates will be put off postgraduate study.

Seventh, the new funding system may exacerbate problems of student hardship. There are signs that the value of maintenance support for students has not kept pace with rising living costs in recent years. The NUS has provided evidence of students struggling to make ends meet, with an associated impact on their studies and increased likelihood of dropping out (NUS 2012b). This is partly the result of excessive accommodation costs at some institutions, but the design of the student loan system could make things worse. Given the government has committed to providing a generous subsidy for student loans, it will prove very expensive to increase the size of maintenance loans. The government will not be prepared to do so, for fear that it will place more pressure on the public purse in the form of loan subsidies. This could prevent maintenance loans from keeping pace with rising living costs, forcing more students to live in hardship.

Eighth, the new funding system has not achieved its stated aim of increasing price competition in higher education. The government had expected that institutions would charge different levels of tuition fee, helping to create a market of different courses for students to choose between, with an average fee of around £7,500, once fee waivers had been taken into account. However, few incentives were put in place to encourage this. As a result, being keen to protect their income and prestigious reputations, most HEIs have charged the maximum they are allowed to, with fees actually averaging around £8,100 net of fee waivers. This is a problem because it means there are few low-cost courses available for those who may need to pay their fees upfront, such as part-time students. It also puts more pressure on the student support system, as the government has to issue and subsidise larger loans than it expected.

Ninth, the way government support is delivered in the new system is very opaque. By increasing tuition fees, the government has generated feelings of hostility among the student body, with many people convinced that the state no longer provides any support for higher education at all. Students will therefore increasingly behave as if higher education is a private good, and there is a danger that families will no longer ‘buy in’ to the principle of higher education as a publicly provided service. In reality, the government does provide support for higher education – but it does this by subsidising loans, in a way which is not transparent to the general public.
Finally, there is a wider concern that the new funding system is not fair across the generations when seen in the context of other tax and spending decisions. Young people have borne the brunt of the government’s spending cuts, including cuts to the educational maintenance allowance, Aim Higher, careers advice, the future jobs fund, and sixth form and further education funding. This all comes on top of being asked to take out larger loans to cover higher tuition fees, (although it is important to note that these loans only represent a cost to graduates once they are in employment later in life). In contrast to this, the government has protected universal benefits for pensioners, helped secure pension incomes, and eased the tax burden on the highest earners in society.

In summary, the government was faced with the difficult task of making spending cuts in higher education. It reformed the student support arrangements in a way that reduced the deficit, maintained funding for HEIs, encouraged the sector to be more responsive to student demands, and rebalanced the contribution made by graduates and taxpayers. Despite these benefits, the fact the reforms were designed around a short-term need to cut the deficit will create problems in the long term. These long-term problems are substantial and outweigh any short-term gains. The current funding system is not sustainable and needs to be reformed. The next section sets out some options for doing so.

6.3 Options for reform

The new student support system has a number of serious flaws, which together prevent it from meeting the principles, as set out above, that we believe should guide policymaking in this area. It will be necessary to rectify these flaws in the medium term, in order to put the sector on a fair and secure financial footing. The Commission has modelled five options for reforming the undergraduate loan system and two options for reforming the funding of postgraduate study. All of these reforms are designed to maintain the flow of resources into higher education at their current level, while rectifying some of the problems with the present system. It is important to note that each of these options has strengths and weaknesses of its own. These are set out clearly, in order to cast light on the trade-offs that are involved.

The modelling presented below is based on the latest available data, and is therefore an accurate reflection of recent trends in higher education. It examines the resource flows between the exchequer, students/graduates and HEIs, including both part-time and full-time undergraduate students in England. The model incorporates all elements of the student support system, including maintenance grants, maintenance loans, tuition fees, tuition fee loans, HEFCE teaching

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21 The modelling was conducted by London Economics. For a detailed explanation of the methodology see the technical appendix, available separately (see note 18).
grants, the national scholarship programme and access agreement expenditure. It uses lifetime earnings profiles from the Labour Force Survey to predict the labour market outcomes of graduates, and therefore their repayment profiles on student loans. The results of the model are all presented in net present value terms.

The current funding system (baseline)

What has been modelled?
The baseline for all our modelling was the 2012/13 funding system. We have constructed the baseline using the latest available data. This shows the funding system for the cohort of students starting in the 2012/13 academic year – that is, under the Coalition government’s new student support system.

Why has this been modelled?
The baseline has been included to enable easy comparison with the reforms presented later in this chapter.

What is the balance of contribution between the state and graduate?
The table below shows the aggregate flow of resources between three key actors in the higher education system: students/graduates, HEIs, and the state/exchequer. This shows the total contribution, or gain, that each of these groups makes over the entire funding period – from the point when this cohort of students start out in higher education to the point at which their loan repayment period has ended 33 years later. It therefore enables us to take an overview of which group is contributing what amount to higher education. The table shows that over the entire repayment period, the cohort of students starting higher education in 2012/13 are expected to contribute around £1,624 million while the state contributes £5,953 million. This means that graduates, in aggregate, contribute 21.5 per cent of the entire cost of student support, with the state contributing the rest.

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
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<tbody>
<tr>
<td>Students/grads</td>
<td>NA</td>
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<tr>
<td>Institutions</td>
<td>£7,262m</td>
</tr>
<tr>
<td>Exchequer</td>
<td>(£5,638m)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>(£1,624m)</td>
</tr>
<tr>
<td>Students/grads</td>
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<tr>
<td>Institutions</td>
<td>NA</td>
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<tr>
<td>Exchequer</td>
<td>(£315m)</td>
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<tr>
<td><strong>Total</strong></td>
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<tr>
<td>Students/grads</td>
<td>(£1,624m)</td>
</tr>
<tr>
<td>Institutions</td>
<td>£315m</td>
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<tr>
<td>Exchequer</td>
<td>NA</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>(£5,953m)</td>
</tr>
</tbody>
</table>

How does the state make its contribution?
Under this system, the state makes the majority of its contribution to higher education by subsidising student loans for full-time students. It contributes approximately £4.2 billion in this way, with the remainder of its contribution made up by maintenance grants, teaching grants and the national scholarship programme.
What is the expected non-repayment on loans (RAB charge)?
The cost of student loans to the government is very high – it expects to lose 39.4 per cent of the total value of loans that it issues.

Which graduates bear the greatest share of the cost?
Because student loans are repaid on an income-contingent basis, high-earning graduates are more likely to repay the full cost of their loan. In fact, due to the interest rate charged, they may pay back slightly more than they borrowed, while the lowest-earning graduates pay back a smaller proportion of their loan.

The table below shows the expected repayment of graduates at different points on the earnings distribution, based on their average lifetime earnings. The 10th percentile represents low earners (those individuals who are at the 10 per cent mark on the income distribution), and the 90th percentile represents high earners (at the 90 per cent mark); the 50th percentile represents the ‘average’ graduate. A negative RAB indicates that the graduate repays more than the face value of their original loan. For further details see the technical appendix, available separately (see note 18).

<table>
<thead>
<tr>
<th>RAB charge</th>
<th>Outstanding amount</th>
<th>Age of repayment</th>
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</thead>
<tbody>
<tr>
<td>Males, full-time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10th percentile</td>
<td>90.3%</td>
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<td>20th percentile</td>
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<td>90th percentile</td>
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</tr>
<tr>
<td>Average</td>
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<td>£7,901</td>
</tr>
</tbody>
</table>

| Females, full-time |
| 10th percentile | 100.0% | £38,696 | Never |
| 20th percentile | 99.4% | £38,524 | Never |
| 30th percentile | 94.7% | £37,121 | Never |
| 40th percentile | 77.3% | £31,967 | Never |
| 50th percentile | 58.5% | £25,486 | Never |
| 60th percentile | 39.1% | £18,045 | Never |
| 70th percentile | 16.0% | £7,548 | Never |
| 80th percentile | 0.5% | £11 | 51 |
| 90th percentile | -1.9% | £0 | 46 |
| Average | 53.7% | £21,933 | 50.4 |

Table 6.4
Expected repayment schedule: 2012/13 baseline scenario
Scenario 1: Adjust loan repayments by raising the top rate of interest

What has been modelled?
Graduates earning over £41,000 currently pay 3 per cent real inflation. This scenario has modelled the impact of raising the top rate of interest to 4.5 per cent above RPI.

Why has this been modelled?
The government heavily subsidises the student loan book. While this helps to reduce the burden of loan repayments for graduates, it is expensive to the Treasury. This forces the government to cap student numbers and puts pressure on other spending commitments. Some commentators have suggested the government should try and recoup a larger share of the loans it issues, in order to free up resources to, for example, expand the number of places available in the system (Barr 2012).

What is the balance of contribution between the state and graduate?
The table below shows that by raising the top rate of interest, the aggregate contribution of graduates increases by £679 million, while the state saves the equivalent amount over the lifetime of the loan. This means that by the end of the repayment period, the graduate cohort will have contributed approximately 30 per cent of the total cost, with the state picking up the rest.

<table>
<thead>
<tr>
<th>From/Change from 2012/13 baseline</th>
<th>Students/grads</th>
<th>Institutions</th>
<th>Exchequer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students/grads</td>
<td>NA</td>
<td>£7,262m</td>
<td>(£4,958m)</td>
</tr>
<tr>
<td>Institutions</td>
<td>(£7,262m)</td>
<td>NA</td>
<td>(£315m)</td>
</tr>
<tr>
<td>Exchequer</td>
<td>£4,958m</td>
<td>£315m</td>
<td>NA</td>
</tr>
<tr>
<td>Total</td>
<td>(£2,303m)</td>
<td>£7,577m</td>
<td>(£5,273m)</td>
</tr>
<tr>
<td>Change from 2012/13 baseline</td>
<td>(£679m)</td>
<td>£0m</td>
<td>(£679m)</td>
</tr>
</tbody>
</table>

How does the state make its contribution?
Under this scenario, the state continues to make the same upfront investment in maintenance grants, teaching grants and the national scholarship programme as it does under the current system. However, it has reduced the amount it subsidises student loans, generating a long-term saving of £679 million.

What is the expected non-repayment on loans (RAB charge)?
Under this scenario the cost of student loans to the government is reduced – it expects to lose 33.3 per cent of the total value of loans that it issues.

Which graduates bear the greatest share of the cost?
Under this scenario, high-earning graduates would contribute a greater share of the total cost than at present. Graduates on low incomes would repay the same amount as they do under the current system.
### Table 6.6

<table>
<thead>
<tr>
<th>Males, full-time</th>
<th>RAB charge</th>
<th>Outstanding amount</th>
<th>Age of repayment</th>
</tr>
</thead>
<tbody>
<tr>
<td>10th percentile</td>
<td>90.3%</td>
<td>£36,830</td>
<td>Never</td>
</tr>
<tr>
<td>20th percentile</td>
<td>59.9%</td>
<td>£29,582</td>
<td>Never</td>
</tr>
<tr>
<td>30th percentile</td>
<td>32.7%</td>
<td>£21,738</td>
<td>Never</td>
</tr>
<tr>
<td>40th percentile</td>
<td>10.2%</td>
<td>£12,037</td>
<td>Never</td>
</tr>
<tr>
<td>50th percentile</td>
<td>-9.8%</td>
<td>£349</td>
<td>Never</td>
</tr>
<tr>
<td>60th percentile</td>
<td>-12.8%</td>
<td>£0</td>
<td>49</td>
</tr>
<tr>
<td>70th percentile</td>
<td>-15.6%</td>
<td>£0</td>
<td>46</td>
</tr>
<tr>
<td>80th percentile</td>
<td>-18.2%</td>
<td>£0</td>
<td>43</td>
</tr>
<tr>
<td>90th percentile</td>
<td>-20.2%</td>
<td>£0</td>
<td>40</td>
</tr>
<tr>
<td>Average</td>
<td>12.9%</td>
<td>£11,171</td>
<td>48</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Females, full-time</th>
<th>RAB charge</th>
<th>Outstanding amount</th>
<th>Age of repayment</th>
</tr>
</thead>
<tbody>
<tr>
<td>10th percentile</td>
<td>100.0%</td>
<td>£38,697</td>
<td>Never</td>
</tr>
<tr>
<td>20th percentile</td>
<td>99.4%</td>
<td>£38,622</td>
<td>Never</td>
</tr>
<tr>
<td>30th percentile</td>
<td>94.7%</td>
<td>£37,933</td>
<td>Never</td>
</tr>
<tr>
<td>40th percentile</td>
<td>77.3%</td>
<td>£35,595</td>
<td>Never</td>
</tr>
<tr>
<td>50th percentile</td>
<td>58.5%</td>
<td>£32,458</td>
<td>Never</td>
</tr>
<tr>
<td>60th percentile</td>
<td>39.1%</td>
<td>£28,863</td>
<td>Never</td>
</tr>
<tr>
<td>70th percentile</td>
<td>16.0%</td>
<td>£22,806</td>
<td>Never</td>
</tr>
<tr>
<td>80th percentile</td>
<td>-8.1%</td>
<td>£11,270</td>
<td>Never</td>
</tr>
<tr>
<td>90th percentile</td>
<td>-22.6%</td>
<td>£0</td>
<td>49</td>
</tr>
<tr>
<td>Average</td>
<td>50.5%</td>
<td>£27,361</td>
<td>51</td>
</tr>
</tbody>
</table>

What are the main strengths of this scenario?
- It reduces the cost of student loans to the government and brings the RAB charge down to below the government’s current estimate. This means the loan system will not be storing up unexpected problems for the future.
- The RAB charge is lower, which means the government could issue more loans in order to expand places in higher education. However, the RAB charge is only slightly lower than the government’s current estimate so there would not be room for a large expansion.
- The cost of making the loan system sustainable is borne by graduates earning over £41,000. It does not have a negative impact on low-earning graduates.

What are the main disadvantages of this scenario?
- It increases the share of the cost borne by graduates. If the state chose not to reinvest the savings in higher education, it would represent a withdrawal of state support for higher education over the long term.
• Some graduates will pay back more than they borrow. The highest earners will overpay their loan by around 20 per cent. This could be seen as a disadvantage if the intention is for graduates to simply pay the ‘sticker price’ of a degree programme. It could also mean the ONS refuses to classify the funding system as a ‘loan’, since the level of overpayment by some graduates is so high.

• Charging a high real rate of interest increases the likelihood that wealthy graduates will opt to repay their debt as a lump sum, in order to avoid having to pay the interest. This means the Treasury would not benefit from increased repayments for this group.

Are there other ways the government could recoup a larger share of the loans it issues?

• Raising the top rate of interest is not the only way the government can recoup a larger share of the loans it issues. The government could save a similar amount of money (£666 million) by lowering the threshold at which graduates start to repay their loans from £21,000 to £18,000. Another option would be to extend the loan repayment period from 30 to 40 years, although this would save a slightly smaller sum of £518 million.

• In contrast to raising the top rate of interest, these options would increase the burden on lower-paid graduates. It would mean that lower-paid graduates would repay a larger share of their loans than at present. This is a disadvantage that would have to be traded off against the disadvantages of raising the top rate of interest outlined above.

Scenario 2: Lower the tuition fee to £6,000

What has been modelled?
This scenario models the impact of lowering the maximum tuition fee to £6,000, with the government reintroducing an upfront teaching grant to compensate HEIs for the loss of income.

Why has this been modelled?
Some commentators have called for tuition fees to be lowered and for the state to reintroduce more upfront funding for tuition. This is based on the belief that the state should make a larger upfront contribution to higher education in recognition of the public benefits that higher education provides (see for example the Campaign for the Public University 2012).  

22 The Labour party has also called for the tuition fee to be lowered to £6,000; however, it recommends that this is funded through a mixture of changing the loan repayment system (so that high-earning graduates pay a higher interest rate and repay their loans for longer) and obtaining additional funds from corporation tax. This is not the scenario that has been modelled here.
What is the balance of contribution between the state and graduate?
The table below shows that by lowering the tuition fee to £6,000, the aggregate contribution of graduates falls by £637 million, while the state increases its expenditure by an equivalent amount over the lifetime of the loan (as the exchequer compensates universities for the loss of fees through additional HEFCE teaching funding). This means that by the end of the repayment period, the graduate cohort will have contributed 13 per cent of the total cost, with the state picking up the rest.

<table>
<thead>
<tr>
<th>From</th>
<th>Students/grads</th>
<th>Institutions</th>
<th>Exchequer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students/grads</td>
<td>NA</td>
<td>£5,591m</td>
<td>(£4,604m)</td>
</tr>
<tr>
<td>Institutions</td>
<td>(£5,591m)</td>
<td>NA</td>
<td>(£1,986m)</td>
</tr>
<tr>
<td>Exchequer</td>
<td>£4,604m</td>
<td>£1,986m</td>
<td>NA</td>
</tr>
<tr>
<td>Total</td>
<td>(£987m)</td>
<td>£7,577m</td>
<td>(£6,590m)</td>
</tr>
</tbody>
</table>

How does the state make its contribution?
Under this scenario, the state makes a larger share of its investment in the form of upfront teaching grants for HEIs – it will provide £1.99 billion in this way. Meanwhile, it will save £1.01 billion on the cost of subsidising student loans, as the overall size of the loan is smaller.

What is the expected non-repayment on loans (RAB charge)?
Under this scenario, the repayment terms of the student loan have not been altered, which means the state is continuing to provide a large subsidy. However, because the overall loan is small, graduates are more likely to repay it. The cost of student loans to the government is therefore reduced slightly – it expects to lose 36.4 per cent of the total value of loans that it issues.

Which graduates bear the greatest share of the cost?
Because the loan repayment system has not been changed, there is little impact on which graduates bear the greatest share of the cost (see table 6.8, over).

What are the main strengths of this scenario?
- The headline tuition fee for students is reduced, which may increase demand for higher education, especially in part-time study. It will also reduce the perception that all students contribute the full cost of their degree, and lower the overall stock of debt that students have to take on.
- The government funds a greater share of teaching in the form of upfront grants. This reduces the burden on future governments, by not deferring a large cost in the form of loan subsidies.
• The overall balance of expenditure is shifted away from the graduate and onto the state. For some commentators, this is a fair reflection of the public benefits of higher education.

**What are the main weaknesses of this scenario?**
• There is a high upfront cost to the government, as it would need to immediately increase teaching grants for HEIs. Under this scenario, the Treasury would have to fund an additional £1.67 billion in HEFCE teaching grants. This would be the upfront annual cost of lowering tuition fees to £6,000 (although the overall cost of this policy to the government would be less than that in the long term, as it would make savings in the future as a result of the reduced cost of student loans).
• Over the entire time period, this policy would cost the government an additional £638 million, which some commentators would argue could be spent on other things.

<table>
<thead>
<tr>
<th>Table 6.8</th>
<th>Expected repayment schedule: £6,000 tuition fee with additional teaching grant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RAB charge</td>
</tr>
<tr>
<td><strong>Males, full-time</strong></td>
<td></td>
</tr>
<tr>
<td>10th percentile</td>
<td>88.1%</td>
</tr>
<tr>
<td>20th percentile</td>
<td>50.7%</td>
</tr>
<tr>
<td>30th percentile</td>
<td>17.7%</td>
</tr>
<tr>
<td>40th percentile</td>
<td>12.0%</td>
</tr>
<tr>
<td>50th percentile</td>
<td>8.5%</td>
</tr>
<tr>
<td>60th percentile</td>
<td>5.7%</td>
</tr>
<tr>
<td>70th percentile</td>
<td>2.6%</td>
</tr>
<tr>
<td>80th percentile</td>
<td>-0.3%</td>
</tr>
<tr>
<td>90th percentile</td>
<td>-3.3%</td>
</tr>
<tr>
<td>Average</td>
<td>20.2%</td>
</tr>
<tr>
<td><strong>Females, full-time</strong></td>
<td></td>
</tr>
<tr>
<td>10th percentile</td>
<td>100.0%</td>
</tr>
<tr>
<td>20th percentile</td>
<td>99.2%</td>
</tr>
<tr>
<td>30th percentile</td>
<td>93.5%</td>
</tr>
<tr>
<td>40th percentile</td>
<td>72.1%</td>
</tr>
<tr>
<td>50th percentile</td>
<td>48.9%</td>
</tr>
<tr>
<td>60th percentile</td>
<td>25.1%</td>
</tr>
<tr>
<td>70th percentile</td>
<td>6.7%</td>
</tr>
<tr>
<td>80th percentile</td>
<td>2.1%</td>
</tr>
<tr>
<td>90th percentile</td>
<td>-0.6%</td>
</tr>
<tr>
<td>Average</td>
<td>49.7%</td>
</tr>
</tbody>
</table>
Scenario 3: How a £6,000 tuition fee could be funded by changes to the terms of student loans

What has been modelled?
Lowering the tuition fee to £6,000 would mean the government had to increase its spending on teaching grants for HEIs. This scenario models whether this could be funded by changing the terms of student loans in order to make the system cost-neutral to the Treasury.

Why has it been modelled?
The previous scenario assumed that the cost of lowering the maximum tuition fee to £6,000 would have to be paid for from the public purse. However, it is also possible to fund a lower tuition fee by altering the repayment terms of the student loan. Essentially, the government could generate savings by making the loan subsidy less generous to graduates and then use these savings to increase teaching grants and reduce tuition fees. This would succeed in bringing down the headline fee but, in aggregate, graduates would contribute the same proportion of the total cost as under the current system – they would just do it in a different way.

Possible changes to the loan system
We have modelled four possible ways that the government could reform the loan repayment system, in order to generate sufficient savings to make the move to £6,000 tuition fees ‘cost neutral’ to the Treasury over the long term. Each of the following reforms, on their own, would be sufficient to achieve this goal:

1. **Charge a real interest rate of 4.6 per cent for all graduates earning over £41,000.** Under the current system, graduates earning over £41,000 are charged a real rate of interest on their student loan of 3 per cent – the government could raise this to 4.6 per cent.

2. **Charge a flat real interest rate of 3.13 per cent for all graduates earning over £21,000.** Under the current system, real interest rates are tapered between 0–3 per cent depending on a graduate’s earnings – the government could charge a real interest rate of 3.13 per cent on all graduates earning more than £21,000.

3. **Uprate the repayment threshold by 1.1 per cent per annum.** The repayment threshold is currently set at £21,000, which will be uprated by 2 per cent per year (in line with earnings). The government could uprate this threshold below inflation, at 1.1 per cent. This would mean a greater proportion of lower-earning graduates repaid more of their loan.

4. **Bring down the level at which graduates start to repay their loans to £17,120.** Rather than uprating the threshold more slowly (as outlined above), the government could simply bring down the repayment threshold to £17,120 and continue to uprate it with earnings as planned.
Each of these changes would enable the government to reduce tuition fees to £6,000 in a way that was cost-neutral to the Treasury. However, they would have different impacts on graduates, depending on their earnings. Increasing interest rates would mean that high-earning graduates would contribute a greater share of the cost than they do at present, however there is a danger that they would opt to repay their loans as a lump sum in order to avoid paying this interest. Lowering the repayment threshold would mean that graduates with lower incomes would contribute a greater share of the cost than they do now.

**What are the strengths of this scenario?**

- It enables the government to lower headline tuition fees, without putting any additional long-term pressure on the public purse.
- By lowering the tuition fee at the same time as lowering the RAB charge, the government would be able to issue more loans and expand places in higher education.

**What are the weaknesses of this scenario?**

- While this scenario would be fiscally neutral for the Treasury over the long term, there would be an upfront cost to the government. This arises from the fact the government would have to increase its contribution on teaching grants immediately but it wouldn’t generate savings from its reform of the loan system until several years down the line. The Treasury would therefore have to fund an additional £1.67 billion in HEFCE teaching grants in the first few years of the scheme before it started to generate higher returns on the loan book.

---

**Scenario 4: Funding tuition through a mixture of student loans and means-tested family contributions**

**What has been modelled?**

This scenario models replacing some of the burden of student loans with a means-tested upfront family contribution. It assumes that the average tuition fee remains at £8,303, but students from well-off families will have to pay some of this in the form of an upfront contribution (and will therefore not be entitled to a full fee loan), while students from less well-off families can continue to access a higher level of loan to cover their fees. The balance of loans and upfront fees for households with different levels of income is set out below.

<table>
<thead>
<tr>
<th>Household income</th>
<th>Upfront contribution</th>
<th>Average tuition fee loan</th>
</tr>
</thead>
<tbody>
<tr>
<td>£0–£25,000</td>
<td>£0</td>
<td>£8,303</td>
</tr>
<tr>
<td>£25,001–£42,600</td>
<td>£643</td>
<td>£7,660</td>
</tr>
<tr>
<td>£42,601–£70,000</td>
<td>£1,473</td>
<td>£6,830</td>
</tr>
<tr>
<td>£70,001+</td>
<td>£2,303</td>
<td>£6,000</td>
</tr>
</tbody>
</table>

Table 6.9

Fee/loan split: £6,000 tuition fee, with additional upfront means tested fee
Why has this been modelled?
One of the criticisms of the current system is that it stores up costs for future generations. By introducing a means tested upfront tuition fee, the cost of higher education would be shared between the graduate and their family. Meanwhile, families who can’t afford the fee would not be prevented from accessing higher education, because they would be eligible for income contingent loans.

The purpose of the loan system would be more about ‘social targeting’ – removing a barrier for people who don’t have access to resources – than simple ‘cost sharing’ (Ziderman 2013). For young students, this reform would introduce an element of intergenerational transfer, with both the parents and the graduate contributing to the overall cost of tuition.

What is the balance of contribution between the state and graduate?
The table below shows that the aggregate contribution of graduates and their families increases by £486 million, while the state reduces its contribution by an equivalent amount over the lifetime of the loan. This means that by the end of the repayment period, the graduate and their family will have contributed 28 per cent of the total cost of tuition, with the state picking up the rest.

<table>
<thead>
<tr>
<th>From</th>
<th>Students/grads</th>
<th>Institutions</th>
<th>Exchequer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NA</td>
<td>£7262m</td>
<td>(£5,152m)</td>
</tr>
<tr>
<td>Institutions</td>
<td>(£7262m)</td>
<td>NA</td>
<td>(£315m)</td>
</tr>
<tr>
<td>Exchequer</td>
<td>£5152m</td>
<td>£315m</td>
<td>NA</td>
</tr>
<tr>
<td>Total</td>
<td>(£2,110m)</td>
<td>£7,577m</td>
<td>(£5,467m)</td>
</tr>
<tr>
<td>Change from 2012/13 baseline</td>
<td>(£486m)</td>
<td>£0m</td>
<td>£486m</td>
</tr>
</tbody>
</table>

How does the state make its contribution?
Under this scenario, the state continues to make a larger share of its investment in the form of subsidising student loans – it will provide £3.68 billion in this way. It will provide the same amount of teaching grant as at present. However, it will save £486 million from the fact that a portion of the tuition costs are being paid upfront, rather than all of this amount being channelled through the loan system.

What is the expected non-repayment on loans (RAB charge)?
Under this scenario, the repayment terms of the student loan have not been altered, which means the state is continuing to provide a large subsidy. The RAB charge therefore remains high, at 38 per cent, although the overall value of loans is smaller than at present.
Which graduates bear the greatest share of the cost?
Because the loan repayment system has not been changed, there is little impact on which graduates bear the greatest share of the cost.

What are the main strengths of this scenario?
• It removes some of the burden of student loans from the state and shifts the cost onto more well-off families.
• It shares the cost of tuition across the generations, with families being asked to contribute some of the upfront cost on a means-tested basis.
• It could free up resources for the state to spend on other areas of higher education.

What are the main weaknesses of this scenario?
• The state continues to heavily subsidise the loan repayments of graduates, meaning it expects 38 per cent of loans to go unpaid. Some commentators have argued that there are more effective ways for the state to make its contribution to higher education.
• Means testing is expensive to administer and there is a high risk of people evading the upfront fee, for example by not declaring their full household income.
• There may be a high cost for families who have more than one person at university. In Ireland, the number of dependent children is factored into means-testing – something similar might be required here.

Scenario 5: A graduate tax
What has been modelled?
This scenario models the impact of abolishing tuition fees and loans and introducing a higher rate of tax for graduates instead. This rate of tax would be an additional 1.96 per cent on all taxable income above £10,000 for a period of 40 years. For the purpose of this model, the maintenance system has not been altered – we assume that it will continue to be funded through a grant and loan.

Why has this been modelled?
A large number of organisations in the higher education sector, including the NUS, have proposed introducing a graduate tax. They argue that it is more efficient, more progressive and fairer to students, as they avoid taking out a loan.

What is the balance of contribution between the state and graduate?
For the purpose of this model, we have calculated the level a graduate tax would have to be set at in order to replicate the resource flows under the current system. A 1.96 per cent tax would ensure that the balance of contribution between the state and graduate remains unchanged at its current level.
How does the state make its contribution?
Under this scenario, HEIs would receive all of their teaching income directly from the exchequer. Some of this income would have been provided through the graduate tax, while some of it would represent additional funding by the state (which is no longer having to subsidise fee loans and can channel these funds into teaching grants).

What is the expected non-repayment on loans (RAB charge)?
As there are no tuition fee loans under this scenario, there is no RAB charge for them. The state would continue to subsidise maintenance loans – it would expect to write off 29 per cent of the value of the loans it issues.

Which graduates bear the greatest share of the cost?
A graduate tax is one of the most progressive forms of repayment system, since high-earning graduates will continue to pay the tax for 40 years, meaning they will contribute a greater share of the total cost than under the current system (when their contribution stops once they have repaid their loan). Under a graduate tax, graduates with an income between £10,000 and £21,000 will make a small contribution, whereas at present they are exempt from repaying their loans.

What are the strengths of this scenario?
• A graduate tax is a very progressive form of payment, with high earners shouldering more of the burden, while those in low-paid jobs do not accumulate debt.
• A graduate tax avoids the need for students to take on high levels of debt and removes the need for tuition fees.
• Funding could still follow the student, providing healthy competition between institutions and putting student choices at the heart of the system.

What are the weaknesses of this approach?
• While the government outlay on a graduate tax is very similar to the outlay on student loans, it is treated in a different way in the government accounts. When the government borrows money to issue in the form of student loans, it is able to treat this as an asset that doesn’t count against the deficit (because it expects to get a lot of the money back). However, if it was to borrow money to fund higher education teaching grants, it would have to score this against the deficit – regardless of the fact it expected to get a lot of money back in the form of graduate tax. Due to these accounting rules, introducing a graduate tax could add an additional £7.26 billion to the deficit, even though the government is not actually borrowing or spending any more money than it does under the current system. Opinion among experts is divided as to whether these accounting rules could be changed by the Treasury.
• There is a danger that the government could change the amount of funding it gives to institutions or the way it allocates those funds. It therefore leaves institutions more exposed to short-term political decisions and, potentially, with less autonomy.

• There is a small danger that more people could avoid paying the graduate tax than the student loan. For example, if a graduate had a period working overseas, they could avoid paying tax for the years they are abroad, whereas under the current system their loan would still be accumulating over this period.

Scenario 6: A postgraduate loan system

What has been modelled?
An income-contingent loan system for postgraduate students would see all students studying a taught masters course as eligible to borrow £10,000 to cover the cost of their tuition fees. Graduates would repay this at 9 per cent on any earnings between £15,000 and £21,000 (all other features of the loan system, such as write-off period and interest rates, would be the same as the undergraduate loan). The loan would be available to full-time and part-time students, and there would be no maintenance support available.

Why has this been modelled?
A number of commentators have expressed concern that students from less well-off homes cannot access finance to fund postgraduate study. This prevents them from gaining qualifications that are increasingly important for access to some professions (see chapter 4). The postgraduate loan system that we have modelled here was first proposed by Leunig (2011).

What is the balance of contribution between the state and graduate?
At present, the state makes a small direct contribution to taught postgraduate courses (we have estimated that it contributes around £103 million in teaching grants). Under a postgraduate loan system, the state would also contribute around £41 million in subsidising loans. Overall, therefore, the state will contribute about 15 per cent of the total cost.

Table 6.11
Resource flows: Postgraduate loan system
How does the state make its contribution?
The state continues to make a contribution in the form of teaching grants – this remains unchanged from the current system. By introducing a loan system on top of this, the state would increase its long-term contribution, because it would also subsidise the loan repayments.

What is the expected non-repayment on loans (RAB charge)?
Because graduates would repay their loans on income between £15,000 and £21,000, the state can expect to get most of the loan value back: the estimated RAB charge is approximately 6.9 per cent. The long-term additional cost to the government of introducing a postgraduate loan scheme is £41 million.

Which graduates bear the greatest share of the cost?
Because loan repayments are made on earnings between £15,000 and £21,000, the vast majority of graduates will repay the full cost of their loan. However, because high earners are charged higher rates of interest, the repayment system is still progressive, with high earners contributing the greatest share of the cost.

Table 6.12
<table>
<thead>
<tr>
<th>RAB charge</th>
<th>Outstanding amount</th>
<th>Age of repayment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Males, full-time</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10th percentile</td>
<td>16.1%</td>
<td>£0</td>
</tr>
<tr>
<td>20th percentile</td>
<td>11.1%</td>
<td>£0</td>
</tr>
<tr>
<td>30th percentile</td>
<td>8.4%</td>
<td>£0</td>
</tr>
<tr>
<td>40th percentile</td>
<td>5.0%</td>
<td>£0</td>
</tr>
<tr>
<td>50th percentile</td>
<td>2.6%</td>
<td>£0</td>
</tr>
<tr>
<td>60th percentile</td>
<td>0.2%</td>
<td>£0</td>
</tr>
<tr>
<td>70th percentile</td>
<td>-2.3%</td>
<td>£0</td>
</tr>
<tr>
<td>80th percentile</td>
<td>-3.7%</td>
<td>£0</td>
</tr>
<tr>
<td>90th percentile</td>
<td>-8.3%</td>
<td>£0</td>
</tr>
<tr>
<td>Average</td>
<td>3.2%</td>
<td>£0</td>
</tr>
</tbody>
</table>

| **Females, full-time** | | |
| 10th percentile | 45.7% | £2,069 | Never |
| 20th percentile | 22.5% | £0 | 48 |
| 30th percentile | 16.1% | £0 | 45 |
| 40th percentile | 12.0% | £0 | 44 |
| 50th percentile | 7.2% | £0 | 45 |
| 60th percentile | 3.2% | £0 | 46 |
| 70th percentile | -1.3% | £0 | 47 |
| 80th percentile | -5.8% | £0 | 48 |
| 90th percentile | -8.0% | £0 | 48 |
| Average | 10.2% | £230 | 45 |
What are the main strengths of this scenario?
• This scenario removes the financial constraints on students who wish to study for a postgraduate qualification. It therefore removes one of the major barriers that prevent less well-off students from studying for a masters degree.
• This scenario is very cost-effective for the government. Graduates continue to contribute the lion’s share of the overall cost of postgraduate study (as they do at present).

What are the main disadvantages of this scenario?
• The overall cost to the government of introducing a postgraduate loan is very low. However, the government would have to borrow money in order to fund the loans. This would add around £646 million to public sector net debt, but it would not count towards the deficit.
• The government may need to regulate the number of students receiving postgraduate loans. Without this, an expansion of student numbers could make the loan system more expensive to the government.
• The government may need to regulate fees for postgraduate courses, in order to prevent universities inflating the cost of their courses in response to the increased supply of finance for students.
• This scenario would prevent the government making some other changes to the undergraduate loan system (for example the government would be unable to lower the threshold on undergraduate loans).
• There are unknown effects on the behaviour of employers. Some employers who currently support students to take masters courses (such as the NHS) may stop offering support if they believe graduate students can take out a loan instead.
• There are a large number of EU students who would be eligible for fee loans. The exchequer would need to take a careful view on the likelihood of loan repayment.

Scenario 7: A postgraduate tax

What has been modelled?
We have calculated how the government could fund taught masters courses through a ‘postgraduate tax’. This would be an additional 1.29 per cent on all income above £10,000, which would be levied for 40 years after graduation.

Why has this been modelled?
If the government decided to introduce a graduate tax for undergraduate study, it may want to address the problems of access to postgraduate education in the same way.
What is the balance of contribution between the state and graduate?
The balance of contribution between the state and the graduate would be similar to scenario 6 (postgraduate loans). The state would contribute £146 million, while graduates would contribute £863 million.

How does the state make its contribution?
While institutions would receive the same income for taught masters students, they would receive this in the form of a grant from the exchequer. The exchequer, in turn, would receive income in the form of a postgraduate tax.

Which graduates bear the greatest share of the cost?
Because graduates contribute through the tax system, this is a very progressive form of repayment. High-earning graduates will continue to make a contribution for most of their working life, relieving some of the burden on lower-paid graduates.

What are the main strengths of this scenario?
The strengths and weaknesses of this scenario are very similar to introducing a tax for undergraduate study. Namely:

- A postgraduate tax removes the financial constraints that students face when trying to access postgraduate study.
- A postgraduate tax is a very progressive form of payment, with high earners shouldering more of the burden, while those in low-paid jobs do not accumulate debt.
- A postgraduate tax avoids the need for students to take on high levels of private debt and removes the need for upfront tuition fees.
- Funding could still follow the student, providing healthy competition between institutions and putting student choices at the heart of the system.

What are the weaknesses of this approach?

- As with the graduate tax, there is a danger that the government’s initial outlay on postgraduate study would have to be scored as current expenditure – even though it expects to get a lot of this money back through the tax system. It is therefore treated differently on the government accounts from a postgraduate loan system, even though the overall outlay and cost of both systems is identical in the long run. Due to these accounting rules, introducing a postgraduate tax could add an additional £904 million to the deficit. As noted above, opinion among experts is divided as to whether these accounting rules could be changed by the Treasury.
- There is a danger that the government could change the amount of funding it gives to institutions or the way it allocates those funds. It therefore leaves institutions more exposed to short-term political decisions and, potentially, with less autonomy.
There is a small danger that more people could avoid paying the postgraduate tax than the student loan. For example if a graduate had a period working overseas, they could avoid paying tax for the years they are abroad, whereas under the current system their loan would still be accumulating over this period.
Britain is going through a tough time economically and socially. Five years on from one of the worst financial crises in our history and our economy is still struggling to recover, our budget is in deficit, unemployment is too high and wages are being squeezed. Our people look to the future with great uncertainty, asking where the jobs of the future will come from and whether the next generation will see fewer opportunities than their parents did.

In the face of this uncertainty, the global strength of our higher education system stands out as a cause for confidence. Research in British universities is world-class, second only to that of the US. Participation in higher education is at an historically high level. Universities and colleges of higher education are now a major civic presence in almost every part of the country and their contribution to the national economy is immense. In an otherwise bleak landscape, higher education is a harbinger of future prosperity.

At the same time, the system faces a number of potentially existential challenges: it faces fierce competition from overseas, its business model is being challenged by low-cost online alternatives, and it faces the threat of imminent spending cuts.

Our immediate task is to get through the next parliament (2015–2020) while protecting investment in this vital national asset and implementing reforms so that, when we emerge from this unprecedented period of austerity, our universities are better deployed to meet our social and economic needs. In this sense, we seek to follow the example of countries like Sweden that have introduced difficult spending cuts and tax rises while also protecting investment in those areas that represent vital investment in their future productive capacity.

It is in this spirit that we have argued that the science budget should be protected in cash terms throughout the next parliament and that overall levels of full-time undergraduate participation should be held constant. At the same time, we have proposed areas where savings could be made, including by asking institutions to make efficiencies. Importantly, we have suggested ways in which the sector could innovate to deliver more higher education places at lower cost, by offering more stay-at-home courses and by accrediting MOOCs.
We have also proposed a number of reforms to ensure that when we do emerge from the crisis, our higher education system can play a powerful role in our national economic and civic life throughout the 2020s. If the reforms we have set out are implemented then Britain will enter the next decade with its science and research base in good health, with a 10-year plan for increasing investment each year in real terms. We will have a powerful new network of Applied Research and Innovation Centres helping to raise the innovation and growth rate in disadvantaged regions of the country and to create new jobs in the strategic industries of the future.

We will have strengthened the position of technical and vocational learning, with a new group of polytechnic colleges able to offer lower-cost local and flexible forms of provision to those who have traditionally been shut out of higher education.

We will also have helped to expand opportunity to those who are currently trapped out of our university system, with more universities working with schools to raise young people’s aspirations and crafting a diverse and more representative student intake. We will have enabled progression and lifelong learning through new subsidised loans for postgraduate and part-time students and by opening up the opportunity for students to accumulate credit and transfer their studies between institutions.

When faced with the difficult years ahead it would be easier to lower our aspirations and narrow our agendas. However, we believe our higher education system can do more than merely survive the years ahead in good health – it can do much more to help us rebuild our economy, expand opportunity and secure a worthwhile future for our country. The crisis from which we are now emerging should encourage us to be more, not less, ambitious about our future and the role that universities and colleges can play in it. If we follow the path set out in this report, we are confident that we can emerge from the years of austerity with our universities in good health and capable of playing a powerful role in a fairer, more innovative and prosperous future.
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Written evidence received from

- The Academy of Medical Sciences
- AGCAS
- Geoffrey Alderman (individual)
- Association of Colleges
- Association of Business Schools
- Graeme Atherton (individual)
- David Bignell, Larissa Fradkin, Gavin Vinson, John Allen and Rachel Ashworth (individuals)
- Roger Brown (individual)
- British Academy of Management
- Campaign for the Public University
- Ian Chaston (individual)
- Louis Couffait (individual)
- Henry Cox (individual)
- De Montford University
- James Derounian (individual)
- James Stafford (individual)
- Danny Dorling (individual)
- Engineering Professors’ Council
- Essex County Council
- Max Farrar (individual)
- John Goddard (individual)
- Graduate Prospects / HECSU
- Greenwich School of Management
- Imperial College Union
- Institute for Mathematics and its Applications
- The Institute of Physics
- Institute of Contemporary Music Performance
- Million+
- Newcastle College, the HE team
- The Open College of the Arts
- The Open University
- The Quality Assurance Agency for Higher Education
• Research Councils UK
• The Russell Group
• Peter Saunders (individual)
• Richard Smith (individual)
• The Society of Biology
• Julia Stapleton (individual)
• Prabhu Subramanian (individual)
• UNISON
• University Alliance
• University and College Union
• University of East London
• University of Oxford
• Vitae
• One anonymous submission

Presentations and seminars
• Phillip Brown, Cardiff University
• Roger Brown, Liverpool Hope University
• Chris Brink, Newcastle University
• Liam Burns, NUS
• Les Ebdon, OFFA
• John Goddard, Newcastle University
• Alix Green, University of Huddersfield
• Hugh Lauder, University of Bath
• Robin Parker, NUS Scotland
• Neil Shephard, University of Oxford
• Roxanne Stockwell, Pearson College
• Rick Trainor, King’s College London
• Jon Wilson, King’s College London
• Tim Wilson, Wilson review
• Alison Wolf, King’s College London

Learning visits
• The Commission conducted two learning visits to higher education institutions in Sheffield and Newcastle. We met with staff and students from a number of institutions in those city-regions.

Interviews
• The Commission’s research team conducted interviews with over 50 experts on various aspects of higher education policy.