

**Submission to the Review of  
Higher Education Funding and Student Support  
January 2010**

**Executive Summary**

1. The UK enjoys one of the most outstanding higher education sectors in the world. A key strength of this high-performing sector is the quality of its leading research-intensive universities. It is important that the Review of Higher Education Funding and Student Support fully considers the financial sustainability of these institutions, and their long-term ability to compete with other global research universities.
2. Students, employers and the national economy currently benefit enormously from the UK's research-intensive universities. They provide an outstanding quality of learning and student experience, resulting in highly employable graduates in great demand with leading employers. They play a vital role in the nation's economy and society, training the next generation of researchers and innovators and producing high quality skilled graduates and postgraduates who will be indispensable to the future success of UK business and industry. Such universities conduct pioneering research which underpins innovation by industry, leads to new technologies and products, and enhances the efficiency and competitiveness of British business. They also draw in investment from major international companies, and contribute to a vibrant local community and culture which attracts businesses from both the UK and overseas. Attracting large numbers of international staff and students, they bring to this country some of the brightest minds from around the world, as well as significant export income.
3. The introduction of variable fees since 2006 has helped universities to put their learning and teaching provision on a more sustainable platform, following a long period of under-investment. It has enabled Russell Group universities to invest more in a world-class student experience. In this submission we explain how this has been achieved through investment in high quality staff, improvements to staff-student ratios, enhanced infrastructure for learning and teaching, changes in curriculum and assessment and new systems to support a changing student population.
4. There is clear evidence that the existence of variable fees, whilst providing badly needed additional income to universities, has also supported an increase in participation in higher education. The introduction of variable fees in England has been accompanied by an improvement in access, with application rates increasing from all socio-economic backgrounds, and with particularly marked improvements in applications and admissions of those from the lowest socio-economic backgrounds. This trend has been reflected in applications and admissions to Russell Group universities, with the number of accepted applicants from the bottom three socio-economic groups rising by over 20% in the period between 2005/06 and 2008/09. Experience within other countries which have implemented graduate contribution schemes also provides powerful evidence that tuition fees coupled with income contingent loans protect access to higher education.

5. Additional income from variable fees has provided universities with more resources to help address the real barriers to access in higher education. These are underachievement at school, a lack of information, advice and guidance, and consequently a lack of aspiration among potential students, and risk aversion. Russell Group universities have achieved early success through investing resources in widening participation activities, but expanding these activities will require additional funding.
6. There are, however, serious shortcomings to the current system of higher education funding and student support. The key issue highlighted in this paper is that the existing system fails to provide sufficient funding to sustain a cadre of world-leading research-intensive universities. We demonstrate the need for further investment to sustain the high quality of these institutions now and in the long-term. Other countries invest far more in their universities, and this threatens the long-term ability of the UK's leading universities to compete with the best institutions elsewhere. For this reason it is widely recognised, both within the sector and beyond, that securing Britain's economic competitiveness for the future will rest on investing more in its research-intensive universities.
7. Recruiting the best staff and students from around the world is essential if research-intensive universities are to offer a world-class teaching and learning experience. To be able to do this, universities must maintain their investment in infrastructure, facilities and staff salaries. Past under-investment left Russell Group universities with a significant backlog in capital investment. Income from variable fees and dedicated capital funding has helped to redress this to a certain extent, but more investment will be needed if research-intensive universities are to maintain and build on recent improvements and continue to provide an internationally excellent learning environment. UK universities have a strong track record in increasing cost-effectiveness and Russell Group universities constantly pursue innovative ways in which to deliver greater cost-effectiveness, efficiency, and higher levels of productivity. Yet these measures alone cannot compensate for under-investment.
8. This paper presents evidence that the financial sustainability of Russell Group universities is severely at risk. A recent report on the financial sustainability of the higher education sector as a whole indicates that the sector is not investing sufficient resources to ensure sustainability in the long term. However, research-intensive institutions face particularly high costs of teaching which are not fully covered by the grant provided by the funding councils. We have conducted an analysis which forecasts the overall financial sustainability of Russell Group universities over the next few years. It predicts that Russell Group universities could be faced with an overall deficit of more than £1.1bn by 2012/13. Universities will be forced to make significant cost reductions, which are likely to involve reducing staff numbers and cutting back on investment in vital infrastructure. In the absence of additional funding, these measures could result in a serious impairment of the student experience and jeopardise the long-term quality of higher education delivered, with serious consequences for students, employers and wider society.
9. A further shortcoming of the current system of student support is that it contains a high proportion of deadweight cost and places significant financial pressure on the Government. This is particularly problematic at a time when the public finances are seriously constrained. The system could be radically improved and made more sustainable by reducing some of the excessive subsidies currently provided, particularly the universal interest subsidy.
10. The first part of this submission focuses on what has worked within the current system of HE funding and student support. In the second part, we show that the current system is

unsustainable, and that changes will need to be made to enable increased investment in research-intensive universities in the future. We have not sought, within this response, to outline detailed ways in which this could be achieved, although we will be submitting supplementary material to the Review which will cover this.

## Part 1: The strengths of the current system

Questions asked by the Review:

- *What has worked? Which parts of the system should be kept, based on the available evidence?*

11. In this part of our paper we address the question of what has worked within the current system of higher education funding and student support. The UK currently has a number of world-class research universities and we highlight the enormous benefits of these institutions for students, employers and the wider economy. We then look at how the additional fee income to universities since 2006 has been used to protect and enhance a world-class student experience, and the need to maintain investment in these areas in the future. Finally, we turn to the question of participation in higher education, and examine the evidence that the introduction of tuition fees in England has supported participation and access to higher education.

### 1.1 The UK currently benefits greatly from world-class research universities

Questions asked by the Review:

- *Is the higher education system providing the quality and academic standards that students, employers and national economic needs require?*



[The UK has] strong comparative advantages. One is our university system, with far more world-class institutions than any country outside the US. Another is the strength of our science base.



Richard Lambert *Reasons to be cheerful?* in *Business Voice*, December / January 2008

12. A key strength of the UK's higher education sector is the outstanding quality of its leading research universities. No country other than the US can count more of its higher education institutions among the world's top 100 universities<sup>1</sup>. These research-intensive universities providing postgraduate and undergraduate teaching within a world-class research institution are an enormous asset to the UK.

13. Economists recognise that leading universities are essential for growth within developed, knowledge intensive economies. For example, strengthening investment in universities and R&D is a fundamental pillar of the blueprint for economic growth within the EU outlined by Andre Sapir<sup>2</sup>. As higher education itself becomes an increasingly global activity, with international competition for staff, students, research collaborations and funding, universities of demonstrable excellence and a global reputation will be particularly important to the success and growth of modern knowledge economies. In this context, developed and developing economies around the world are investing heavily in higher education because they "want the best universities in the world"<sup>3</sup>

<sup>1</sup> Times Higher Education QS world university rankings 2008

<sup>2</sup> Andre Sapir: *An agenda for growing Europe: making the EU economic system deliver.* ("The Sapir Report") Report of an Independent High-Level Study Group established on the initiative of the President of the European Commission July 2003

<sup>3</sup> President Nicolas Sarkozy, quoted in "Sarkozy unveils €35bn 'big loan' boost for French universities and museums"; [guardian.co.uk](http://guardian.co.uk), Monday 14 December 2009

14. The scope and strength of the research and teaching activity of Russell Group universities has a major impact upon the economy<sup>4</sup>. Representing 12% of UK higher education institutions by number:

- They have a total economic output of £22.3 billion per annum – equivalent to 40% of the total output for the sector
- They are responsible for supporting 243,000 jobs UK-wide – equivalent to 36% of jobs supported by the sector
- They are a major UK export industry, with overseas earnings of over £2 billion per annum – 38% of total earnings for the sector



The British are good at universities. It is not just that Oxford and Cambridge remain among the best in the world; another dozen regularly rank in the international top 100. Given their relative poverty compared with American universities and the country's size, it is an extraordinary achievement.



Will Hutton: *You can tell a great university by the companies it keeps* The Observer, Sunday 2<sup>nd</sup> March 2008

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<sup>4</sup> These statistics draw on the Universities UK report “The impact of universities on the UK economy”, Universities UK, November 2009. The report calculated the Gross sectoral output of HEIs as being equivalent to 2.38x the Sectoral Gross Output (Total Turnover), and the total number of jobs created as being equal to 2.03x the number employed directly for the sector (figures for total sector income – turnover – and total number employed are taken from HESA stats for 2007/08). Total export earnings is calculated based on total university revenue from international sources plus the estimated expenditure and secondary economic activity generated by international students. Again, multipliers are taken from the UUK report. Since an international breakdown was not available for most areas of HESA-reported income, figures are based on the ratio of international:UK income reported for the whole sector in the UUK report, the exceptions being research grant income and overseas tuition fees and contracts, for which the RG figure for non-EU students has been used).

## Educating the next generation of innovators

15. Universities have a vital role in endowing graduates with high level skills. Our economy relies increasingly upon newer, more knowledge-based industries. There is therefore a growing need for higher-level skills to capitalise effectively upon the new technologies which underpin modern industry.



It has now become clear that the context in which economic policies have been developed changed fundamentally over the past thirty years... What is needed now is less vertically integrated firms, greater mobility within and across firms, more retraining, greater flexibility of labour markets... and higher investment in both R&D and higher education.



Andre Sapir: *An agenda for growing Europe: making the EU economic system deliver.* ("The Sapir Report") Report of an Independent High-Level Study Group established on the initiative of the President of the European Commission July 2003

16. Research by the Work Foundation has noted that universities, along with other educational institutions, are 'critical to the creation of intellectual and knowledge assets in the national and local economies'. The knowledge generated by higher education institutions will be crucial to underpinning both the UK's recovery from the current economic downturn, and a successful economy in the future.<sup>5</sup>
17. UK graduates, and particularly those from Russell Group institutions, are among the most highly sought-after in the world<sup>6</sup>, and this is reflected in the premium salaries they receive from employers. There is a substantial body of evidence which shows that graduates of research-intensive universities secure a significant and sustained wage premium over peers graduating from other institutions.<sup>7,8</sup>
18. A key aspect of education within research-intensive universities is teaching led by world-class research. It is a learning experience which draws on the expertise of leading academics, outstanding libraries, laboratories and other teaching facilities, and an intelligent and motivated peer group. In recent years, the quality of the learning experience within Russell Group Universities has been further augmented by investment in technology-enabled learning and innovative teaching methods. This combination of factors helps to develop amongst graduates the independent and critical thinking, entrepreneurial mindset and innovative abilities so much valued by employers.<sup>9</sup>

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<sup>5</sup> Bassanini, Andrea and Scarpetta, Stefano (2001), 'The driving forces of economic growth: Panel data evidence for the OECD countries', *OECD Economic Studies*, No. 33, 2001/II, 10-56; The Leitch report has also highlighted the importance of higher-level skills for the success of the UK economy (<http://www.dcsf.gov.uk/furthereducation/uploads/documents/2006-12%20LeitchReview1.pdf>). The report recommended a target of 40% of adults to be educated to level 4 (first degree level) or above, with a commitment to continued progression.)

<sup>6</sup> 5 Russell Group universities featured in the top 10 institutions in the Times world employer review rankings, and a total of 13 Russell Group universities featured in the top 50 (THE – QS World University Rankings 2008)

<sup>7</sup> See, for example, Arnaud Chevalier and Gavan Conlon, March 2003, 'Does it pay to go to a prestigious university?' Centre for the Economics of Education, LSE; McNally S, Hussain I, Telhaj S, *University Quality and Graduate Wages in the U,K* March 2009; Chevalier, A *Does Higher Education Quality Matter in the UK?* April 2009, Unpublished

<sup>8</sup> Chevalier and Conlon (2003) *Ibid*

<sup>9</sup> Martin and Tang state that graduates acquire these skills "by being taught by university faculty who also carry out research, mostly publicly funded". Martin P R and Tang P, *The Benefits from Publicly Funded Research*, SPRU paper no. 161, June 2007; Pavitt, K (1991) *What makes basic research economically useful?* Research Policy, 20, pages 109–119.

19. As shown within a Russell Group paper on the research-led learning experience, this research-intensive teaching environment contributes to the quality of teaching, enhances the student experience and builds the high level skills needed by society<sup>10</sup>:
20. Leading research universities have a particular role to play in educating the country's most influential scientists and innovators. As Professor Alison Wolf has noted: "*To support research and innovation, countries need a sizeable, but not vast, number of top-class, superbly trained researchers and developers, not a very large number of imperfectly trained ones.*"<sup>11</sup> Research has shown that the training of highly skilled graduates is the primary mechanism through which investment in university research creates economic benefit.<sup>12</sup> It is graduates, primarily, who conduct research both within industry and academia, and who bring to businesses the expertise to draw on new knowledge and innovations from external organisations in the UK and overseas.

### Leading research and supporting innovation and entrepreneurship

21. Research-intensive universities are major contributors to the UK's position as one of the world's leading research nations. This research power underpins the innovation which is so important to economic growth and to the UK's future international competitiveness. For example, Russell Group medical research may add as much as £320m to the UK's GDP every year<sup>13</sup>. Russell Group research is also frequently the basis for new, high-tech businesses such as Renovo, a University of Manchester spin out which has licensed the products of its research for hundreds of millions of pounds<sup>14</sup>.
22. As well as the traditional concept of 'technology transfer' the recent NESTA publication, *The Connected University* notes that "for the majority of firms, universities are most important not as sources of intellectual property, but for other types of knowledge that are harder to package up and codify"<sup>15</sup>. The report also points to the increasing significance of university-business links within the 'open innovation' model, where businesses rely on ideas flowing into them to improve innovation and business performance, rather than on in-house R&D.
23. NESTA also notes that "for the majority of firms, universities are most important not as sources of intellectual property, but for other types of knowledge that are harder to package up and codify"<sup>16</sup>. The UK's leading research universities also work with existing businesses to support the development of new products and services, and improve business performance. They are at the forefront of academic engagement with

<sup>10</sup> The Russell Group of Universities, *Research-led learning, the heart of a Russell Group Learning Experience* [www.russellgroup.ac.uk](http://www.russellgroup.ac.uk)

<sup>11</sup> Wolf, A., *Does Education Matter?*, Penguin, 2002, p.247.

<sup>12</sup> See, for example: Salter, A J and Martin, B R, *The Economic Impacts of Basic Research: a critical review*, Research Policy 30 2001. 509–532 and references within; Martin P R and Tang P, *The Benefits from Publicly Funded Research*, SPRU paper no. 161, June 2007; Pavitt, K (1991) *What makes basic research economically useful?* Research Policy, 20, pages 109–119

<sup>13</sup> The economic impact of public and charitable funding for medical research in cardiovascular science was recently calculated to equate to a GDP increase of 38% of the original investment (Medical Research; What's it Worth? Estimating the economic benefits from medical research in the UK' Health Economics Research Group (HERG) Brunel University, Office of Health Economics (OHE) RAND Europe; For the Medical Research Council, the Wellcome Trust and the Academy of Medical Sciences; November 2008). This estimate has been extrapolated across the spectrum of medical research funding at RGUs, based on total grant funding to RGUs of £822m (HESA finance returns 2007/08: Table 5b – Income analysed by source. Medical research figure based on clinical medicine and allied subjects)

<sup>14</sup> See *The Economic Impact of Research produced by Russell Group Universities – Part 1*, for an overview of impact resulting from some of the most significant commercial licenses and spin out companies generated by Russell Group universities

<sup>15</sup> Kitson M, Howells J, Braham R and Westlake S, *The Connected University – Driving Recovery and Growth in the UK Economy*, NESTA Research Report, April 2009

<sup>16</sup> Kitson M, Howells J, Braham R and Westlake S, *The Connected University – Driving Recovery and Growth in the UK Economy*, NESTA Research Report, April 2009

business<sup>17</sup>. The report on the economic impact of Russell Group universities' research highlights how these institutions are also engaged in long-term strategic partnerships, providing businesses with access to cutting edge ideas, skills and equipment. Through research-based consultancy they help businesses to address specific problems, develop near market innovations and technology, and improve their business processes and management. Universities also contribute to businesses' human capital – not only through the skills of their graduates, but also through the provision of continuing professional development and training.<sup>18</sup> Continued investment in research-intensive universities and the success of these partnerships therefore supports the long-term competitiveness of UK industry.

24. Engagement by universities with local businesses and the wider community also benefits their local economies. Many Russell Group universities made special efforts to help the local community during the recession by providing graduate internship schemes, additional career information advice and guidance, networking opportunities for SMEs, and special continuing professional development courses.<sup>19</sup>

### Attracting international investment

25. As global leaders in research and innovation, universities attract investment from the world's leading international industries. Businesses invest both through direct collaborations and in the research-intensive industry clusters which develop around leading universities, such as 'Silicon Fen' in Cambridge, which attract investment from international R&D-intensive companies<sup>20</sup>.
26. Research shows that a destination country's research infrastructure, including its universities, is very important to investment decisions; so the status of our leading universities amongst the world's best research universities has contributed to the UK becoming the second most popular destination in the world for international R&D investment. The UKTI has noted that the UK's success as an international base for R&D (second only to the US) is largely due to the "immediate access to leading research institutions" for companies, with our leading universities "providing the means to tap into global networks on the back of their research excellence".
27. Universities also make a key contribution to the cultural and intellectual life of their local communities, helping to make them attractive locations for international businesses and their staff. They have been described as having a 'halo' effect through the community engagement and activities of academics and students. Geoffrey Boulton notes that "such activities stimulate cultural vitality. They attract clever people to come to a region and retain them there, and attract the companies they work for"<sup>21</sup>. So the presence of world-class universities has a two-fold impact on attracting international business and skilled workers to boost local and national economies.

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<sup>17</sup> In 2007/08 Russell Group universities secured a total of £244 million from the commercial sector for contract research, 66.2% of the total across the UK HE sector. 16 of the top 20 recipients of contract research income from large companies were Russell Group universities, and 12 of the top 20 recipients from SMEs.

<sup>18</sup> *The economic impact of Russell Group universities' research*, (Ibid)

<sup>19</sup> Examples include a university-based graduate internship scheme provide by Imperial College, the 'Manufacturing Transformation Programme at Cambridge, which is providing business advice and supporting product innovations within 150 SMEs, and a package of initiatives at Newcastle University which includes widening access to graduate information, advice and guidance initiatives, providing graduate apprenticeships for 50 individuals, and enterpriser courses. See [www.russellgroup.ac.uk](http://www.russellgroup.ac.uk) for paper on how RGUs contribute to the local and national economy and made extra efforts to help during the recession

<sup>20</sup> Laura Abramovsky, 'Helen Simpson, Geographic proximity and firm-university innovation linkages: evidence from Great Britain'; December 2008

<sup>21</sup> Boulton, Geoffrey *What are Universities for?* University World News, 29<sup>th</sup> March 2009 (Based on a talk given by Geoffrey Boulton at the European University Association convention held in Prague on 18<sup>th</sup> -21<sup>st</sup> March 2009).



## Attracting international students in a globally competitive market

28. Research-intensive universities attract large numbers of the most talented international students to this country. Not only are these students a source of significant export earnings, they are also an important supply of internationally mobile graduates for UK-based employers, and a catalyst for sparking future collaboration with and investment in the UK by overseas universities and businesses. International research students are particularly important to the UK's global standing in research.
29. A recent report by the Council for Industry and Higher Education (CIHE) found that there are clear benefits to business in this country from employing international graduates, because they:
- a. bring specific skills and knowledge about different countries, languages and cultures that businesses need in order to develop new markets;
  - b. help businesses understand and deal more effectively with overseas customers/suppliers;
  - c. broaden the outlook of a company's workforce and can make the business more receptive to new ideas.<sup>22</sup>
30. International students can also help businesses to exploit global commercial networks. As one graduate recruitment manager from an investment bank reported '*We need international students and graduates to help us exploit overseas market opportunities; we need an international mindset.*'<sup>23</sup>
31. International students make decisions on which country to study in based predominantly on their perception of the overall quality of a country's higher education institutions.<sup>24</sup> There is growing global competition for the best international students, and in order for international students to continue to be attracted to this country, it is essential that the teaching quality in our universities remains on a par with the best in the world.

## **1.2 Fees help support a world-class student experience**

Questions asked by the Review:

- *How has the added income to institutions from the 2006 changes been used?*
  - *Have there been identifiable improvements in the quality of teaching in the period since 2006? What are the areas where quality needs to improve further?*
32. If the UK is to continue to benefit from world-leading universities, it is important that they are able to offer a world-class learning experience to their students. Additional income through variable fees has helped Russell Group universities to deliver improvements in teaching and to the student experience. We have presented case studies showing how this has been done through:
- a. Attracting and retaining high quality staff

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<sup>22</sup> CIHE, *Global Horizons: How international students can help business*, July 2009

<sup>23</sup> *ibid*

<sup>24</sup> OECD, *Internationalisation and Trade in Higher Education*, Paris, 2004. Research has shown that the most important factors for international students in choosing their country of study are quality of higher education and employer recognition of qualifications (Higher Education Policy Institute, *Projecting Demand for UK Higher Education from the Accession Countries*, 2004). MORI research undertaken in two of the EU accession countries (Hungary and the Czech Republic) found that the UK was the most popular choice as a destination for higher education (MORI, 'Through other eyes: how the world sees the United Kingdom', 2000).

- b. Improving staff-student ratios
- c. Investing in improved infrastructure for learning and teaching
- d. Supporting changes in curriculum and assessment
- e. Adapting to a changing student population

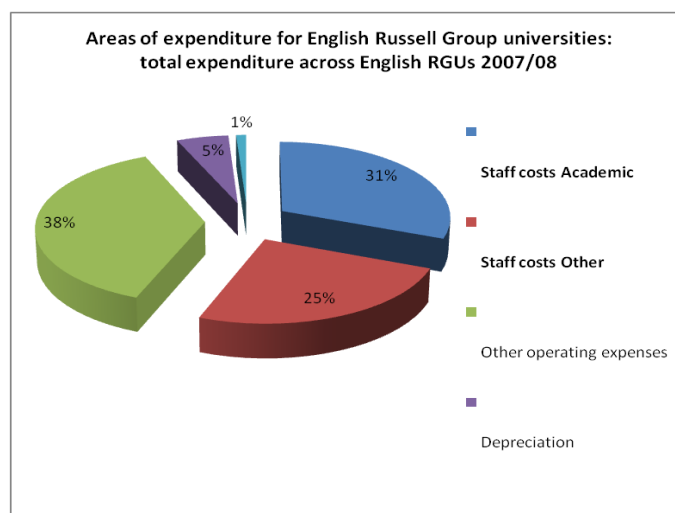
33. Annex A contains a number of case studies which illustrate the ways in which Russell Group universities have invested additional income to enhance the learning experience of their students.

Helping to meet the growing costs of attracting and retaining world-class university staff

34. Higher education as an activity relies on human interaction, and staff costs inevitably represent the major part of universities' expenditure. Russell Group universities are committed to ensuring that their students are taught by the most talented and most highly qualified academic staff. In order to attract and retain staff of this calibre, it is essential that universities are able to offer internationally competitive pay and reward packages, and the cost of this has grown significantly in recent years. Income from variable fees has therefore been an important factor in helping Russell Group universities retain high calibre – often world-leading – academic staff to deliver an outstanding education to their students.

35. Staff costs currently constitute 56% of expenditure within Russell Group universities, with academic staff costs constituting almost a third of all expenditure (figure 1). This closely matches spending among the comparable US universities.<sup>25</sup> HEFCE's latest report on accountability returns for higher education institutions in England reported that staff costs had risen on average by 7% per year over the last 10 years, and that the sector was forecasting staff costs to increase by 8.8% in 2008.

**Figure 1:** Distribution of expenditure within English RGUs<sup>26</sup>



36. In the past, recruiting leading academics from overseas has helped Russell Group universities to enhance and, in some cases, to pioneer UK research within key academic

<sup>25</sup>See section 2.1 for fuller analysis of income and expenditure by some comparator US institutions.

<sup>26</sup> Source: HESA finance returns 2007/08; Table 6: Expenditure by Activity

fields<sup>27</sup>. However, the disparity in resources between UK institutions and those in some other OECD countries may restrict our universities' ability to continue to do this<sup>28</sup>. An international comparison of academic staff salaries showed that salaries for senior academic staff in the UK continue to be outmatched by those offered by many international competitors: the UK ranked 7<sup>th</sup> in a table of 15 developed and developing countries, with higher salaries being offered to senior academic staff in Canada, the US, Australia, New Zealand and Saudi Arabia.<sup>29</sup>

37. World-leading academics are particularly mobile. This vital, but itinerant, supply of leading talent is likely to remain in the UK only as long as academics regard their career opportunities and remuneration as being competitive with what might be available overseas.
38. It is also important to note that the research strength of a university relies not only on adequate numbers of high quality dedicated research staff, but also on adequate resources for teaching and other activities. Any reduction in such resources inevitably has an impact on research, because the time available for staff to carry out world-class research will be limited by heavier teaching loads.
39. Being taught by leading academics enhances the student experience and is considered by students themselves to be a core aspect of world-class teaching.<sup>30</sup> Without the additional resources which variable fees have provided to offer competitive pay and reward packages, Russell Group universities would have been increasingly constrained in their ability to recruit the best international talent and thereby to maintain the quality of both their research and teaching.
40. However, increased investment will continue to be necessary in the future. Recent data for 13 Russell Group institutions shows that their staff costs rose by around 4% between 2007/08 and 2008/09<sup>31</sup>, but this still represented more than three times the corresponding increase in home and EU undergraduate fees for the same year. This illustrates the difficulty that the UK's leading universities face in sustaining the investment in staff which is necessary in order to offer higher education on a par with other leading universities around the world.

### Improving student:staff ratios

41. Research-intensive universities continue to lead the UK sector in maintaining low student:staff ratios, and this is integral to a high quality research-led education.<sup>32</sup> For some Russell Group universities, maintaining low SSRs has been a specific focus of

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<sup>27</sup> For example, the University of Oxford succeeded in recruiting a leading professor from an Ivy League university, to head up its research in Radiation Oncology; a field in which the UK had previously lagged far behind other developed countries.

<sup>28</sup> Evidence shows that, within many disciplines, the higher pay and reward levels offered within the US causes a 'funneling' effect of academic talent towards the US as their careers progress. In physics, for example, a study of the world's most highly cited physicists showed that 10% were educated to first degree level in the UK; almost a quarter of the number educated in the US. However, the number of highly cited physicists currently working in the US was 18 times greater than the number working in the UK (Ali, Showkat and Carden, Giles and Culling, Benjamin and Hunter, Rosalind and Oswald, Andrew J. and Owen, Nicola and Ralsmark, Hilda and Snodgrass, Natalie (2007) *Elite scientists and the global brain drain*. Working Paper. University of Warwick, Department of Economics, Coventry)

<sup>29</sup> LE Rumbley, IF Pacheco, PG Altbach *International Comparison of Academic Salaries. An Exploratory Study*, Boston College Center for International Higher Education (2008); Reported in <http://www.insidehighered.com/news/2008/11/05/worldpay> (Accessed on 25th November 2009)

<sup>30</sup> Data from the international student barometer survey (see section 2.1) shows that good teaching and expert lecturers are key priorities for international students

<sup>31</sup> Data provided by Russell Group finance directors: see section 2.3

<sup>32</sup> The average student:staff ratio across Russell Group Universities was 12.9, compared to 16.9 across the rest of the sector (HESA 2007/08 student-staff ratios)

investment of the additional income obtained through variable fees. The University of Leeds, for example, has targeted increased income from fees at staff recruitment to reduce SSRs, achieving a reduction of almost 20% since 2001. Other Russell Group universities have also invested income from variable fees in creating new academic staff posts, and have succeeded in making significant reductions in their SSRs, including the University of Southampton, which achieved a 21% reduction last year, the University of Bristol, which achieved an 11% reduction, and the University of Liverpool (see case study 1).<sup>33</sup>

42. A report on the sustainability of learning and teaching in higher education produced by the Higher Education Financial Sustainability and Strategy Group (FSSG) found that student staff ratios within universities have, overall, grown significantly over the past 15 years<sup>34</sup>. The impact of these ratios (SSRs) on the quality of teaching is complex. Most importantly, it is the *quality* of the interaction which students have with staff, including the kind of academics who teach them, their seniority, and their active participation (or not) in research, which has the biggest impact on teaching quality. Nevertheless, a reduction in the amount of contact which students have with academics has generally been regarded negatively by students. In addition, universities have introduced strategies to cope with increasing SSRs, including increasing the size of teaching groups, which have negatively impacted upon the student experience.
43. An ongoing commitment and additional investment will be important. The FSSG working group concluded that “the current level of SSRs is not sustainable in the medium term...without some other compensating investment by institutions. If this is not achieved, and the elevated level of SSRs continues, the quality and reputation of UK teaching will be at risk”.

#### **Case study 1: Investing to reduce student:staff ratios – the University of Liverpool**

The University of Liverpool has undertaken a sustained programme of investment to create new staff posts, reducing the student:staff ratio (SSR) and improving the student experience.

Since the introduction of variable fees, the University has invested 35% of the additional income from fees in new academic posts. The result has been a significant improvement in the SSR (HESA stats show a 12% improvement in the two years between 2005/06 and 2007/08), and the university now boasts one of the best student:staff ratios in the country.

Such a significant improvement has important benefits for the learning experience of Liverpool’s students. The benefit is not limited to more contact time and greater availability of academic staff: the university notes that investing in new posts has brought new expertise to its teaching, allowing new programmes to be offered, a greater choice of modules, and a more enriching and rewarding education for students.

#### **Investing in improved infrastructure for learning and teaching**

44. High quality buildings and facilities are essential to supporting world-class teaching and an outstanding student experience. Data from IGRAD highlights just how important

<sup>33</sup> HESA Student:Staff ratios; ratios by institution.

<sup>34</sup> Financial Sustainability Strategy Group “*The sustainability of learning and teaching in English higher education*” A report prepared for the Financial Sustainability Strategy Group by JM Consulting (December 2008)

learning facilities are to international students. For example, good internet access was rated consistently as being of the highest priority, along with high quality library facilities, sports facilities and good accommodation. In all of these areas, international students at Russell Group universities report a level of satisfaction equal to, or greater than, those at leading international competitors.<sup>35</sup>

45. This success has been built on the back of substantial investment in recent years aimed at ensuring the highest quality facilities are available to students. The University of Nottingham has recently invested in ‘learning hubs’ in a number of its libraries, combining more formal learning environments with breakout zones and eating areas. The hubs have helped create a more attractive and flexible learning environment for students, supported by state of the art equipment and technology. Investing in such technology-driven learning, accommodation and sports facilities is one of the key ways in which Russell Group universities have improved the quality of teaching they offer to students. Many of these programmes of investment – both remedial investment in existing facilities and developing much needed new buildings and facilities for students – would not have been possible without the additional income which variable fees have provided. Some of the case studies Annex A are examples of investments of this kind.
46. Recent investments in infrastructure will need to be sustained if Russell Group universities are to deliver a teaching and learning experience which remains world-class in the future.<sup>36</sup> Along with income from fees, dedicated capital funding from the funding councils has been hugely important in helping our universities to address many of their outstanding investment needs, but, as discussed in section 2, the UK HE sector is still facing a backlog on infrastructure investment in learning and teaching. The FSSG report found that UK universities “are not investing near the sustainable level...and significant additional investment is required.”<sup>37</sup>

#### Supporting changes in curriculum and assessment

47. Research-intensive universities have striven to offer a quality of teaching and assessment which has kept pace with the changing requirements of modern higher education. Many courses now offer more modular learning and assessment, and have become increasingly flexible - often adapting to meet the changing demands of students and employers. New courses have been developed in close co-operation with employers, such as the *Flying Start* accountancy degree developed by Newcastle University in collaboration with PriceWaterhouseCoopers, and the professional development Masters programme which the University of Bristol has developed for Rolls Royce engineers. In other cases, Russell Group universities have developed more flexible provision for students from diverse backgrounds, such as the “2+2” degrees offered by the universities of Warwick and Liverpool, where students study for two years at a local college, before taking their final two years at the university itself. Again, technology-enabled learning and innovative teaching methods are a key aspect of Russell Group universities efforts to modernise their curriculum and assessment. Case study 2 illustrates this.

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<sup>35</sup> Based on data from the International Student Barometer survey of international students at Russell Group universities and some major international competitor institutions. See section 2.1 for further details.

<sup>36</sup> Evidence from the participation of UK research libraries in the LibQUAL+ survey tool (a worldwide survey of research libraries run by the American Association of Research Libraries) shows that the UK as a whole is behind the major US libraries, and perhaps those in Germany.

<sup>37</sup> Financial Sustainability Strategy Group (December 2008 – Ibid)

### **Case Study 2: Investing in E-learning at the University of Nottingham**

The University of Nottingham has recognised the importance of incorporating e-learning within its teaching activities and has invested significant resource to develop a more coordinated e-learning strategy across the University.

Building on £750,000 of its own funds, together with £480,000 from the funding council, the University has invested in skilled staff, such as graphic designers, software developers and educational technologists, to support the development of innovative teaching programmes across the University's curriculum.

One of the most successful ventures has been the creation of a new software tool, Xerte, which enables academics to develop learning objectives simply. The tool's success has been recognised by numerous awards, including a short listing in the World Innovation Summit for Education Awards 2009, and is now used in over 100 institutions worldwide.

E-learning has been widely used within the university to support novel curricula and new learning methods. 'Flagship' projects include the development of an MSc in Brewing Science and a "One Stop Language Stop" to provide learning support for students studying one of the 15 modern language courses taught at Nottingham.

48. These changes have unquestionably enhanced the learning experience of many students, but they have also been costly. The FSSG report found that more frequent renewal of courses, the introduction of increasingly modular learning and assessment, and the increasing requirement for courses to become more flexible and responsive to the changing demands of students and employers, had all imposed significant additional costs on university teaching. This point is re-iterated in the Joint Negotiating Committee for Higher Education Staff (JNCHES) *Review of Higher Education Finance and Pay data*<sup>38</sup>. It notes that, "the higher education sector is adapting to the more marketised environment that the Government wishes to see, but institutions are incurring extra operating costs in doing so, and these will continue for the foreseeable future."
49. Income from fees has increased the overall level of resource which universities can access per student, and has helped Russell Group universities support investment in more expensive, flexible modes of teaching. As the trend toward more costly teaching models which better meet student demand increases, ongoing investment will be essential if universities are not to find themselves under-resourced to deliver these models, and their long-term sustainability threatened.

#### Investing to support a changing student population

50. Russell Group universities, along with the rest of the higher education sector, have also devoted significant resources to recruiting, supporting and retaining students from increasingly diverse backgrounds. This investment has drawn to a large degree on the additional resources which universities have received from variable tuition fees. In 2007/08, Russell Group universities spent between them £40 million on bursaries and scholarships, and more than £5 million on additional outreach activities. On average,

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<sup>38</sup> JNCHES *Review of Higher Education Finance and Pay Data, Final Report* (December 2008)

they devoted 26% of their additional fee income towards bursaries, scholarships and widening participation initiatives<sup>39</sup>.

51. Many of these widening participation initiatives, such as the foundation years for aspiring medics at King's College London and the interdisciplinary science foundation programme at the University of Leeds, have had marked success, but they are also costly. The King's College London programme<sup>40</sup>, for example, costs approximately £190,000 a year for academic staff alone, for an intake of fifty students. Through expanding these and similar programmes Russell Group universities could do more to increase access, but this will rely on further investment. It is also essential that government and others focus on addressing the disparity in attainment in school education, which remains the principle barrier to participation in higher education, particularly at world-class universities.

#### Providing improved student support services

52. The FSSG report also found that across the sector there had been a necessary increase in the range, quality and expertise of student services, and that the cost of these services had 'grown very significantly' in the last 15 years.

53. Variable tuition fees have allowed Russell Group institutions to invest more in providing comprehensive assistance and support to their students. Student support services have been developed extensively within Russell Group universities in recent years, and are an important part of improving retention and attainment among a more diverse student population, as well as responding to the additional demands and expectations of students paying variable top-up fees. This too has added to the cost of teaching and the learning, but is a major factor in maintaining universities' international competitiveness. For example, a study for the charity Mobility International USA recently commended King's College London and University College London for their comprehensive services for international students with disabilities.<sup>41</sup>

54. The case studies in Annex A illustrate examples of how universities are investing in outreach activities and in support for students with disabilities.

#### Without income from fees, the UK's leading research universities would have been unable to maintain a world-leading student experience

55. The discussion in this document has highlighted the impact which income from variable fees has made across almost every facet of the student experience delivered within research-intensive institutions, from ensuring teaching is led by expert academics, to providing the high quality accommodation, leisure and learning facilities that today's students rightly expect as paying customers.

56. The delivery of high quality teaching and learning requires a long-term, sustained commitment. Without sufficient funding, Russell Group universities may have been able to continue delivering high quality teaching for a time. However chronic under-investment in the facilities and personnel needed to sustain a world-class higher education institution

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<sup>39</sup> OFFA, *Access agreement monitoring: outcomes for 2007/08*, March 2009

<sup>40</sup> This refers to the King's College Extended Medical Degree Programme (EMDP). Info available at <http://www.kcl.ac.uk/schools/medicine/ugstudy/entry/extended>

<sup>41</sup> The study looked at case studies of four universities in London to examine the provision they offered international students with disabilities. It commended King's College London and University College London for their comprehensive disability services, which included a wide range of cutting edge software to support teaching and learning among disabled students, the use of laptops, note-takers and distraction-free examination locations and, at UCL, a free disability examination service. These services were far more comprehensive than those reported for the two non-Russell Group Universities included in the study.

would eventually have led to a serious decline in the quality of teaching and the learning experience of students. According to the University of Nottingham:

*“Without the overall level of funding received difficult decisions would have to have been made so that the University lived within its means. Expansion and improvements would have been scaled down or abandoned and the widening participation initiatives diminished and probably less effective.”*

57. Variable fees have helped achieve a great deal in the effort to place universities on a sustainable financial footing and redress historic under-investment in the student experience. However, further investment will be needed if this progress is to be sustained, and the long term competitiveness of the UK’s research-intensive universities assured.

### **1.3 The introduction of variable fees has not harmed and may well have contributed to improvements in participation and access**

Questions asked by the Review:

- *How have the participation trends for different groups of students changed since 2006 and to what extent can these be attributed to the 2006 reforms?*
- *What can we learn from international trends in participation, in particular are there models of higher education provision elsewhere that deliver higher levels of participation than England with comparable quality and levels of investment?*
- *Students do remain concerned about the costs of higher education. What evidence is there to demonstrate the impact of these concerns on decisions made about participation in higher education and progression from higher education into further study, research or work?*

58. The introduction of variable fees in England has not harmed access to higher education, but has coincided with an increase in applications and participation by all groups, including lower socio-economic groups. This is consistent with a strong body of evidence from other countries which demonstrates that tuition fees, if coupled with income-contingent loan repayments, do not have a negative impact on access to higher education. Whilst access to higher education is an extremely important issue, the real barriers to participation lie in a complex range of socio-economic factors beyond the HE sector. However, tuition fees have provided universities with important tools to help address some of these barriers.

#### The introduction of variable fees in the UK has been accompanied by improvements in access

59. Data on admissions collected since the introduction of variable fees in 2006/07 shows that fees have not harmed access to higher education within the UK. For the period spanning the introduction of top-up fees in England in 2006, there has been an overall increase in applications from home and EU students to English HEIs of 24% between 2005 and 2009<sup>42</sup>. Notably, application increases were much larger than in Scotland (which has seen an increase of only 8.4% over the same period), where tuition fees have not been implemented. Between 2008 and 2009, applications to English universities increased by 10.1%).

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<sup>42</sup> UCAS: latest university application figures as of 30<sup>th</sup> June 2009 and 30<sup>th</sup> June 2006 ([http://www.ucas.co.uk/about\\_us/media\\_enquiries/media\\_releases/2009/2009-07-09](http://www.ucas.co.uk/about_us/media_enquiries/media_releases/2009/2009-07-09))

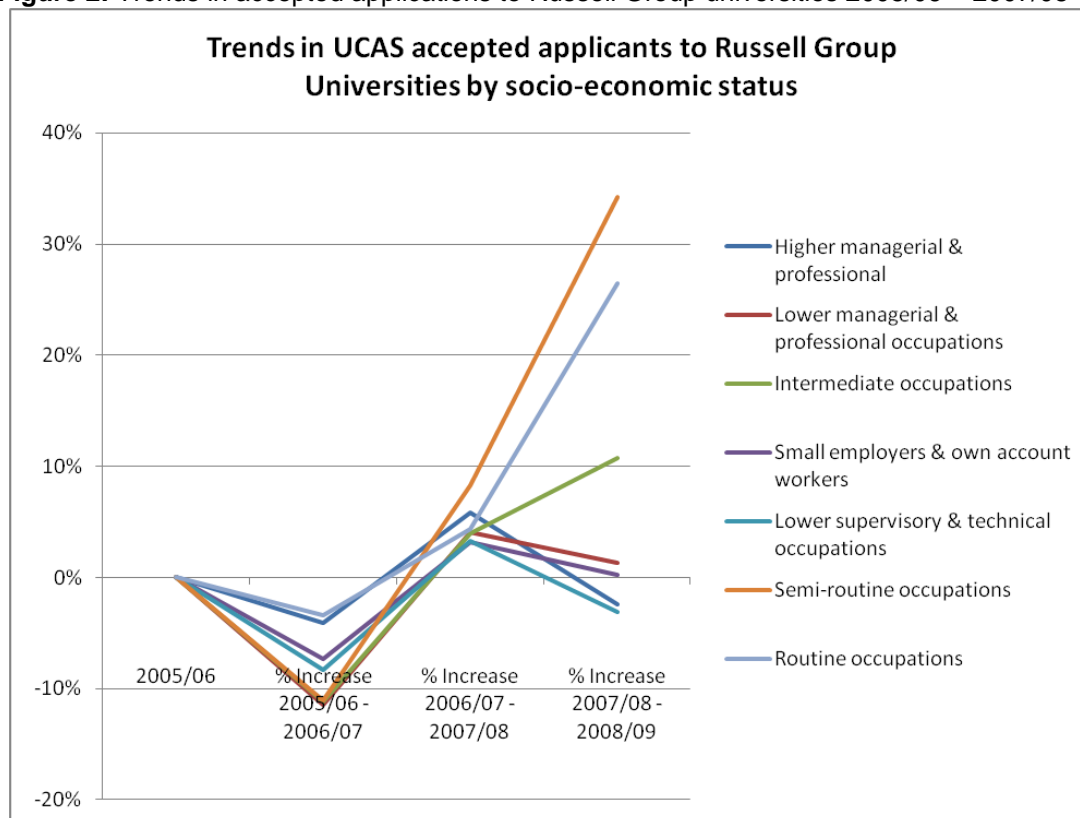


60. In addition, the proportion of applicants from lower socio-economic groups appears to be increasing since the introduction of variable fees. Total applications accepted from the bottom three socio-economic groups rose by 7.3% between 2006 and 2007, and by a further 18% between 2007 and 2008<sup>43</sup>
61. Russell Group institutions themselves have seen a similar trend in applications since the introduction of variable fees. In the period between 2005/06 and 2008/09, the number of accepted applicants from the bottom three socio-economic groups rose by over 20%. This significant increase resulted in an overall rise in the proportion of accepted applicants from the lower three socio-economic groups across Russell Group universities, from 14.5% in 2005/06 to 17.5% in 2008/09 (an overall increase of 20%).

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<sup>43</sup> UCAS Final figures for 2008 entry (January 2009)  
[http://www.ucas.co.uk/about\\_us/media\\_enquiries/media\\_releases/2009/2009-01-15](http://www.ucas.co.uk/about_us/media_enquiries/media_releases/2009/2009-01-15)

**Figure 2:** Trends in accepted applications to Russell Group universities 2005/06 – 2007/08<sup>44</sup>



62. Far from jeopardising their efforts to widen participation, the introduction of variable fees has been accompanied by a successful drive to increase access to Russell Group institutions, by students from less advantaged backgrounds.

International experience shows that fees coupled with income-contingent repayments protect access to higher education

63. A system of income contingent loans to cover the full tuition fee means that tuition fees impose no immediate costs on students. The costs of higher education are borne entirely by graduates – not students – and only once they are in a position to afford repayments. Provided tuition fees continue to be repaid through such a system, therefore, there should in theory be no bar to access irrespective of a student’s ability to pay.

64. This argument is backed by a wealth of international experience which shows that tuition fees, coupled with an income-contingent system of repayments, protect access to higher education.

65. Australia first introduced a universal tuition fee in 1989, of A\$2,250 per year, under the Higher Education Contributions Scheme (HECS). The system has been modified since, but the basic principal remains the same: students have the option of paying fees up-front to receive a 25% discount or, alternatively, graduates make income-contingent repayments on their tuition fees once their income exceeds a threshold. Research demonstrates clearly that access levels have improved for all socio-economic groups since the introduction of HECS. Overall participation of 18 year olds from the lowest

<sup>44</sup> Source: UCAS figures of accepted applicants (2005/06 – 2007/08), obtained from HESA applications statistics

income quartile increased over the period 1988 – 1998; with a significant increase in participation from this quartile following the fee increases in 1997<sup>45</sup>. Participation rates among all income brackets increased substantially over the period. Previous research also supports these findings. In particular, Andrews (1999)<sup>46</sup> shows that the proportion of higher education entrants from the lowest income quartile was unchanged following the introduction of HECS; moreover, his research indicates that student attitudes to debt did not show any variation by income level.

66. Tuition fees were introduced in New Zealand in the late 1980s, and had risen to NZ\$3,500 by 1999. Again, fees were coupled with income-contingent loans to students, and evidence indicates that participation rates have seen a significant overall increase, without any negative impact on the proportion of entrants from lower income or minority ethnic backgrounds.<sup>47</sup>

67. In Ireland, by contrast, tuition fees were abolished in 1996, yet evidence shows that this has not improved access among students from lower social economic backgrounds. Indeed, there is some evidence to suggest that participation levels have decreased further among some poorer communities in Dublin.<sup>48</sup> The move has, however, undermined the ability of the best of Ireland's universities, such as Trinity College Dublin, to compete on the international stage.<sup>49</sup>

#### International experience indicates that high levels of participation require high investment - or quality is undermined

68. It is widely acknowledged that the UK punches well above its weight in delivering a world-class higher education system with less funding than the majority of its competitors. In terms of its research output and the international prestige of its leading institutions, higher education in the UK is second only to the US, and no other country in the world can boast similar levels of quality with similar levels of investment.

69. According to the latest OECD data, the UK now has a participation rate slightly above the OECD average<sup>50</sup>. Of the nine countries in the survey which do report higher participation rates, almost all invest more in higher education, as a proportion of GDP, than the UK<sup>51</sup>. The UK currently has 11 institutions in the top 100. International trends therefore appear to indicate that high participation levels demand high levels of investment. A combination of high participation levels with low overall investment does not seem to be compatible with a world class higher education system.

#### The real barriers to access lie elsewhere, but fee income can help address them

70. There is strong evidence that a focus on fees and their impact on participation in higher education neglects the real barriers to access, which are:

- Underachievement at school driven by socio-economic forces which take effect at a very early age

<sup>45</sup> Chapman, Bruce and Chris Ryan (2002) *The access consequences of the Australian income contingent charge system for higher education*, Centre for Economic Policy Research, Australian National University

<sup>46</sup> Andrews, L (1999) *Does HECS deter? Factors affecting university participation by low SES groups*, Higher Educational Division Occasional Paper 99F, Canberra

<sup>47</sup> McLaughlin, Maureen (2003) *Tertiary education Policy in New Zealand: Fullbright report*

<sup>48</sup> Clancy, Patrick (2002) *Survey of Access to Higher Education*, Higher Education Authority, Dublin.

<sup>49</sup> Barrett, Sean. OECD Review of Higher Education in Ireland, 2004.

<sup>50</sup> Education at a Glance 2009: OECD Indicators

([http://www.oecd.org/document/24/0,3343,en\\_2649\\_39263238\\_43586328\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/24/0,3343,en_2649_39263238_43586328_1_1_1_1,00.html))

<sup>51</sup> The exceptions being Norway and Iceland

- Lack of good information, advice and guidance
- Risk aversion rather than debt aversion

71. There is a robust body of evidence which demonstrates that academic attainment before the age of 18, rather than financial considerations, is the most important factor in whether a student will go on to higher education. When A-level grades are taken into account, students from deprived and wealthy backgrounds are equally likely to go to university.<sup>52</sup> Evidence also demonstrates that the problem of educational inequality begins at a very young age.<sup>53</sup>

72. The socio-economic gap widens as children progress through school and by GCSE the gap becomes a gulf. Attainment of 5+ good (A\*-C) GCSEs varies by over 40 percentage points between the top and bottom socio-economic backgrounds (77% compared to 31% in 2002), so that children with professional parents are well over twice as likely to gain five or more good GCSEs than children with parents in routine occupations. By school leaving age, the pupil from the lower social strata is at least three times more likely to drop out than a peer from a higher social class. Young people whose parents have degree qualifications are disproportionately more likely to study post-16 at A-level – 61% of pupils with at least one parent with a degree level qualification as opposed to 27% where neither parent has A-level qualifications.<sup>54</sup>

73. Effective information, advice and guidance (IAG) about the benefits of higher education is essential to ensure that young people have the information they require to make decisions that will maximise their life chances. Many pupils, particularly those from lower socio-economic backgrounds, can lack the aspiration to attend university because they do not receive adequate IAG at school about higher education and its benefits. Indeed, there is evidence that some teachers may not be encouraging some of their students to consider Russell Group universities.<sup>55</sup> It is particularly important that pupils from families who haven't been to university, or who have less knowledge about higher education than others, are given robust support and guidance at school.<sup>56</sup>

74. A common criticism of tuition fees is that students from less well-off backgrounds will be more sensitive to the perceived risks of taking on significant debt. This in itself conflates two issues, which are discussed separately below: the first is whether students are averse to *debt per se*; the second is whether students are averse to the perceived *risks* in taking on a specific kind of debt.

75. There is strong evidence to suggest that students from lower income backgrounds are not more averse to debt *per se*. For example, The Bank of England has calculated that mortgage holders in lower income households have increased their debt as a proportion of income more than any other group, while unsecured debt rose most in households in which the head was aged under 25<sup>57</sup>. Most evidence that lower income students are less

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<sup>52</sup> Studies have shown that 94% of children who receive 25 A level points or more from lower socio-economic backgrounds enter higher education, compared to 97% of children from higher socio-economic groups (Youth Cohort Study, DfES (2002): analysis has been replicated by the NAO for 2006 UCAS application data, with similar results. There was minimal difference in acceptance rates by SEG for students with the same level of attainment (NAO, 2008).

<sup>53</sup> Feinstein, L (1999) *Pre-school Educational Inequality? British children in the 1970 cohort*. London: Center for Economic Performance.

<sup>54</sup> DfES (2002). Youth Cohort Study: The Activities and Experiences of 16 Year Olds in England and Wales: <http://www.dcsf.gov.uk/rsgateway/DB/SFR/s000382/V5sfr04-2003.pdf>

<sup>55</sup> The Sutton Trust and Institute of Education (2008). "Primed for Success": <http://www.suttontrust.com/reports/PrimedforSuccess.pdf>

<sup>56</sup> McKenzie, H. (2005). "The Tuition Trap". Toronto: Ontario Confederation of University Faculty Associations. September 2005.

<sup>57</sup> For example, The Bank of England has calculated that mortgage holders in lower income households have increased their debt as a proportion of income more than any other group, while unsecured debt rose most in households in which the head was aged under 25 (See reference in Bradley P, Whitehead A *Excellence, Equity and Access: squaring the circle of higher education funding*, November 2003.)

willing to take on debt (e.g. Callender and Jackson, 2005; 2008),<sup>58</sup> is based on survey responses from prospective students, which does not necessarily provide an accurate reflection of students' actual behaviour. A more empirical study, which used a series of pre-defined options to measure behaviour, rather than attitude, found no evidence that students from lower socio-economic backgrounds were more debt averse.<sup>59</sup>

76. The question of willingness to take on debt to fund higher education in fact is one which relates more to *risk aversion*<sup>60</sup> i.e. the willingness of potential students to take on debt to obtain returns which are uncertain. Thus, the work by Callender cited above shows that students from lower income backgrounds are less convinced of the likely return from their higher education. These studies also fail to control for attainment when assessing debt aversion. This is a key omission, since research demonstrates that academic attainment is the most significant factor in determining a student's willingness to take on financial *risk* in order to attend university. A 2007 report for the Sutton Trust concludes that "The factor that exerted the most powerful effect (negatively) on intention to study at a local university was a student's average GCSE grades".<sup>61</sup>
77. The current system is designed to minimise risk to students and therefore to minimise the impact of risk aversion on application behaviour. Income-contingent loans coupled with a repayment threshold mean that graduates only begin repayments when they are earning, and only at a level which they can easily afford. Students from lower income backgrounds therefore need not fear that they will be faced with unsupportable costs on graduating. The system provides an added incentive through providing grants and bursaries to students from lower income backgrounds. Although the income contingent system ensures that risk to students is minimised, by reducing overall costs these grants can provide an added attraction to more risk-averse students. However, the current system over-compensates for risk aversion and includes far too many 'deadweight' costs. The most significant of these unnecessary costs is the interest rate subsidy. This subsidy is of little or no benefit to the poorest students and graduates, and represents a cost which is both miss-directed and far exceeds what is necessary to protect access. This is discussed in more detail in a later section of this paper.
78. Additional income from tuition fees has provided universities with more income to undertake targeted outreach activities to increase awareness of higher education and its benefits, to provide better information and guidance to potential students regarding course choice, and to support educational activities in schools. Bursaries have also been found to be an effective recruitment tool in 'encouraging high-achieving lower-income students to opt for more selective universities and colleges'<sup>62</sup>. Far from being a barrier to access, income from tuition fees has therefore provided universities with an additional tool to help them address some of the real barriers to widening participation.

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<sup>58</sup> Callender, C and Jackson, J. (2005). Does the fear of debt deter students from higher education? *Journal of Social Policy*, 34(4), 509-540; Callender, Claire & Jackson, Jonathan. "Does the Fear of Debt Constrain the Choice of University and Subject Study?" *Studies in Higher Education*. Vol. 33, No. 3. 2008

<sup>59</sup> Eckel C, Johnstone C, Monmarquette C, Rojas, C, *Debt aversion and the demand for loans for post-secondary education* Public Finance Review, Vol. 35, No. 2, 233-262 (2007)

<sup>60</sup> See for example Piatt W and Robinson P, *Opportunity for whom? Options for funding and structure of post-16 education* IPPR (2001) –

<sup>61</sup> Sutton Trust, "Knowing Where to Study?: Fees, Bursaries and Fair Access". 2007

<sup>62</sup> Claire Callender *Awareness, take-up and impact of institutional bursaries and scholarships in England*, A report to the Office for Fair Access (November 2009)

## Part 2: Why the current system is unsustainable

Questions asked by the Review:

- *What has not worked? Which parts of the system should be changed, based on available evidence?*
- *What cost pressures do institutions envisage arising in the future if they are to continue to deliver progress in participation and quality?*

79. This part of our paper considers some important ways in which the current system of higher education funding and student support is unsustainable. We look first at the constraints which the current system imposes on income to universities and the potential for these funding constraints to damage the international competitiveness of our leading research universities. There is a growing consensus that increased investment in the UK's world-class universities will be necessary in the future. We also present new evidence of the cost pressures which institutions are facing, based on financial forecasts from Russell Group universities. Finally, we consider how the current system of student support could be made more sustainable and affordable for the government, by addressing its excessively high subsidies and deadweight costs.

### **2.1 The current funding system does not allow research-intensive universities access to sufficient resources to remain internationally competitive**

80. According to recent OECD data, the UK's annual expenditure on higher education is lower than most other OECD countries, in terms of a proportion of GDP per capita, expenditure per student, and as a proportion of total education funding. The UK spends approximately \$11,484 (USD) per student, while the US spends \$22,476 and Australia spends \$13,959 (USD).<sup>63</sup> Relative to GDP per capita, Australia spends roughly 25% more per student, and the US spends 50% more per student. The UK spends just 1.3% of its GDP on higher education, and is outpaced not only by the US and Australia, but also by Canada, Korea, Japan<sup>64</sup> and even China. At 2.9% of GDP, the US spends more than twice what the UK does.<sup>65</sup>

81. The disparities in levels of investment are even more dramatic if we consider the level of resource available to some of the very best research universities in the US against which the UK's research-intensive universities compete (figure 3).

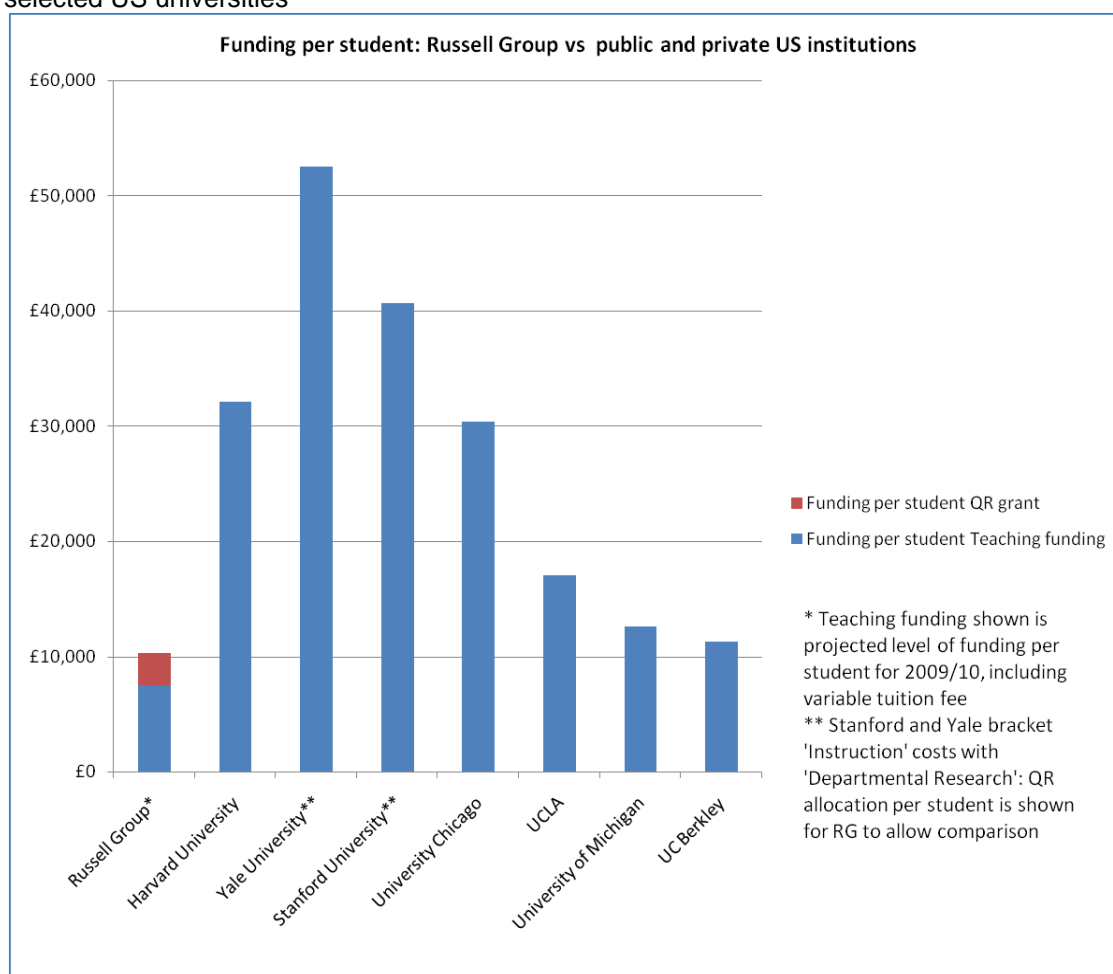
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<sup>63</sup> These figures and those following include both public and private investment

<sup>64</sup> OECD *Education at a Glance 2009: OECD Indicators*

<sup>65</sup> Figure of 1.5% GDP is for 2005. Source: *China Statistical Yearbook, 1999-2007*. Quoted in Litao Z and Sixin S, *China's 'Great Leap' in Higher Education*; EAI Background Brief No. 394, 24 July 2008.

**Figure 3:** Comparison of funding per student within English Russell Group institutions compared to selected US universities<sup>66</sup>



82. As figure 3 shows, funding per student is significantly higher within the elite private US universities. However, the public US institutions we looked at also appeared to spend significantly more per student than the resource nominally available to Russell Group universities. With much higher funding levels overall, the US universities are able to invest more in key aspects of the student experience. Between them, the private US universities in the sample spent nearly £6,000 per student on student services in 2007/08: almost as much as the overall resource per student available in Russell Group institutions. They spent on average £90m on library services, or £5,700 per student. Moreover, even with these levels of investment, leading US institutions have recently identified a need to further enhance the quality of the student experience they are offering. These figures indicate how difficult it is for Russell Group universities to compete on a level playing field with leading institutions in the US.

83. Many other countries, such as Australia, China, India and Germany, as well as the US are **increasingly concentrating investment in order to develop or sustain a limited number of high quality research universities:**

<sup>66</sup> The nominal level of funding per student for Russell Group universities is compared with high-performing private and public universities in the US. Funding per student figures from the US are very approximate, and derive from annual reports and accounts. For Yale and Stanford, expenditure on instruction (teaching) is bracketed with departmental research (as opposed to organised research) so figures will tend to overestimate somewhat actual expenditure on teaching. However, none of the figures include expenditure on libraries, which significantly increase the estimation of expenditure per student.

- a. The **French** Government, as well as recently granting autonomy to 20 universities, has established Operation Campus. This will direct funding to alliances of leading universities forming 'super-campuses', in an effort to make France's universities more internationally competitive. More recently, the French president, Nicholas Sarkozy, has pledged an €11bn investment in the country's universities as the centrepiece of a €35bn spending plan to prepare France for the "challenges" of the future. According to president Sarkozy, "Our aim is quite simple: we want the best universities in the world."
  - b. **Germany's** Excellence Initiative concentrates funding at clusters of excellence to support leading research and strengthen the higher education institutions<sup>67</sup>. The German Government has just agreed a further €2.7 billion (on top of the original €1.9 billion) in funding for the Excellence Initiative.
  - c. **Denmark** underwent an extensive process of mergers in 2007, during which its large number of universities and independent research institutes was rationalised. From 12 universities and 13 national research institutes, the new 'map' of research and higher education in Denmark resulted in just 8 universities and 3 national research institutes. One of the key rationales for the process was the need to achieve greater international exposure for the new institutions which resulted.
  - d. In 1998, **China** announced its goal of building world-class universities. Its strategy is to concentrate resources on a small number of institutions to enable them to become internationally excellent. 'Project 985' focussed on just 10 universities, committing €1.27bn in its first phase, between 1995 and 2003. A second phase, which ran from 2003-2007, included 39 HEIs, with a significantly higher budget<sup>68</sup>. Following these high levels of central government investment, China's ten historic universities have been climbing up international league table rankings for universities.
  - e. **South Korea's** World-Class University project provides 830 billion won (around £4 billion<sup>69</sup>) in funding for 18 universities, to support their international competitiveness.
84. Some countries like Germany and France have previously been able to enjoy relative economic success despite lacking universities which could be described as world-leading. However, they recognise that they can no longer rely on their former economic strengths and need now to improve the quality of their universities. They know that times have changed and that increasingly, a knowledge intensive, high-tech economy relies on the presence of leading universities to remain competitive and productive. As many of the world's economies aim to become more high-tech, knowledge-based economies, the need for excellent universities becomes more pressing. Andre Sapir has noted that the stagnation of economic growth in the EU has resulted from "its failure to transform itself into an innovation-based knowledge economy". His report on European Growth notes that Europe's future competitiveness will depend on investment in R&D and higher education<sup>70</sup>.

<sup>67</sup> The Excellence Initiative was established as part of Germany's Innovation Campaign for publicly-funded science to ensure that Germany remains a world leader in research. The DFG (which runs the Initiative jointly with the Germany Science Council) website states: "The aim of the Excellence Initiative is to make Germany a more attractive research location, making it more internationally competitive and focussing attention on the outstanding achievements of German universities and the German scientific community." The Initiative has 3 funding lines: clusters of excellence between institutions, to promote leading research; institutional strategies to promote top-level university research; and graduate schools to train doctoral students. ([http://www.dfg.de/en/research\\_funding/coordinated\\_programmes/excellence\\_initiative/general\\_information.html](http://www.dfg.de/en/research_funding/coordinated_programmes/excellence_initiative/general_information.html))

<sup>68</sup> Figures as reported in: Brandenburg, U and Zhu, J, *Higher Education in China in the Light of Massification and Demographic Change: Lessons to be Learned for Germany*, CHE, October 2007

<sup>69</sup> <http://www.xe.com/ucc/convert.cgi>

<sup>70</sup> Andre Sapir: *An agenda for growing Europe: making the EU economic system deliver.* ("The Sapir Report") Report of an Independent High-Level Study Group established on the initiative of the President of the European Commission July 2003



85. This kind of increased investment will help universities in countries such as these to attract more and more talented international staff and students. Evidence shows that importance of maintaining ‘concentrations of talent’<sup>71</sup> in world-leading institutions to preserve a strong international reputation for excellence in higher education. Due to existing strengths in research and higher education, the UK already finds itself near the head of a race towards a leading knowledge-economy. If it is to maintain this lead, and to continue to benefit from world-class universities, it is critically important that these institutions are adequately resourced to compete for talent with those in other countries.

There is wide recognition that the UK’s comparative advantage in higher education will only be sustained through increased investment in its universities



There is a need for aggressive investment in R&D [and] in Russell Group universities



Will Hutton, *The Innovation Revolution*, Presentation to the Strategy Unit, September 23<sup>rd</sup> 2009  
(<http://www.cabinetoffice.gov.uk/media/306759/innovation-revolution.pdf>)

86. The UK punches above its weight in the international sphere – a fact which international league tables, for all their faults, make very apparent. However, as these tables also show, other countries are catching up<sup>72</sup>, and many stakeholders and commentators have emphasised that current funding levels will not be sufficient to sustain the pre-eminent position of the best of the UK’s universities in the long-term.

87. The CBI’s higher education taskforce in its report *Stronger Together: Businesses and Universities in Turbulent Times* notes the importance of a world-class university system to a competitive economy and to the success of business. It states that “a vibrant university sector is critically important to the wellbeing of the UK”. The Director General of the CBI has emphasised that the UK’s world-class university system is one of its key competitive advantages and these sentiments were echoed by Sam Laidlaw, Chief Executive of Centrica and chair of the CBI’s higher education taskforce, who has stated that higher education will be “critical to our economic recovery and sustaining our international competitiveness”.



Higher education matters. It matters for the UK: it will be critical to our economic recovery and to sustaining our international competitiveness.



Sam Laidlaw, Task Force Chairman and Chief Executive, Centrica (Speech to launch the CBI higher education task force report, Tuesday 20 October 2009)

88. However, the CBI report also notes that public funding will come under ‘severe pressure’ over the next few years at the same time that universities face growing competition from around the world. The report notes that, in such an environment, heavy cuts in the public

<sup>71</sup> *The concentration of research funding in the UK: driving excellence and competing globally* Russell Group report [www.russellgroup.ac.uk](http://www.russellgroup.ac.uk)

<sup>72</sup> Times Higher Education QS World University Rankings, 2009: [www.topuniversities.com](http://www.topuniversities.com)

funding of teaching and research would damage the long-term competitiveness of the UK. It recommended increasing support for universities through making savings in the student support system and increasing private investment, both from businesses and students.

89. The Council for Industry and Higher Education (CIHE), which also represents a cross section of business and university members, has likewise made the case for raising investment in UK universities. The Council's 2008 report *US and UK competitiveness and the role of universities* points out that "all who benefit from higher education will have to invest more to sustain our internationally competitive university sector". More recently, Richard Brown, former chief executive of the CIHE, has published a report which sets out the contribution which higher education makes to our economy and the need to increase investment in universities. It concludes that universities are vital to our economy and society, but that their funding is under pressure, and new measures need to be explored to address this funding challenge.<sup>73</sup>
90. Leading economic thinkers such as Andre Sapir, of the Brussels European and Global Economic Laboratory and Will Hutton, Executive Vice Chair of the Work Foundation, have stressed the need to invest in leading universities to promote economic growth. Sapir in his report to the European commission, highlighted under-investment in universities as one of the key reasons behind Europe's lack of growth in comparison to the US, and has subsequently emphasised the need for European nations to invest more in science and higher education<sup>74,75</sup>. Will Hutton has stressed the critical role that investment in universities will play in the UK's economic future and the need to invest in world-class infrastructure, including universities<sup>76</sup>. In a presentation to the Prime Minister's strategy unit this year, he emphasised the need for "aggressive public investment in R and D [and] Russell Group Universities".<sup>77</sup>

Russell Group Institutions are internationally competitive, but their leading position depends on sustained investment in high quality teaching and facilities

91. For a university to be internationally competitive, it must maintain a concentration of world-class talent<sup>78</sup>. This includes world-leading academics, established mid-career academics and promising young researchers and teachers. The importance of attracting and retaining good academic staff is expanded on below.
92. A world-class university also needs to attract high quality students. The very best students from home and overseas are also vital to the stimulating intellectual environment that characterises leading institutions. International students have many options open to them when choosing where to study, including leading institutions in their own country, and in many other countries around the world. An analysis of the views of these students therefore provides valuable information about the competitive position of Russell Group institutions in a global context, and what will be required to maintain their position in the future.

<sup>73</sup> Richard Brown, *Invest for Greatness in Higher Education, Valuing Higher Education*, 2009

<sup>74</sup> Andre Sapir: *An agenda for growing Europe: making the EU economic system deliver.* ("The Sapir Report": ) Report of an Independent High-Level Study Group established on the initiative of the President of the European Commission July 2003

<sup>75</sup> Aghion P, Dewatripont M, Hoxby C, Mas-Colell A, Sapir A, *Higher Aspirations: an Agenda for Reforming Europe's Universities* 2008.

<sup>76</sup> Will Hutton *Slashing the national debt can wait. First we must invest, invest, invest* The Observer, Sunday 13 September 2009

<sup>77</sup> Will Hutton *The Innovation Revolution*, Presentation to the Strategy Unit, September 23<sup>rd</sup> 2009 (<http://www.cabinetoffice.gov.uk/media/306759/innovation-revolution.pdf>)

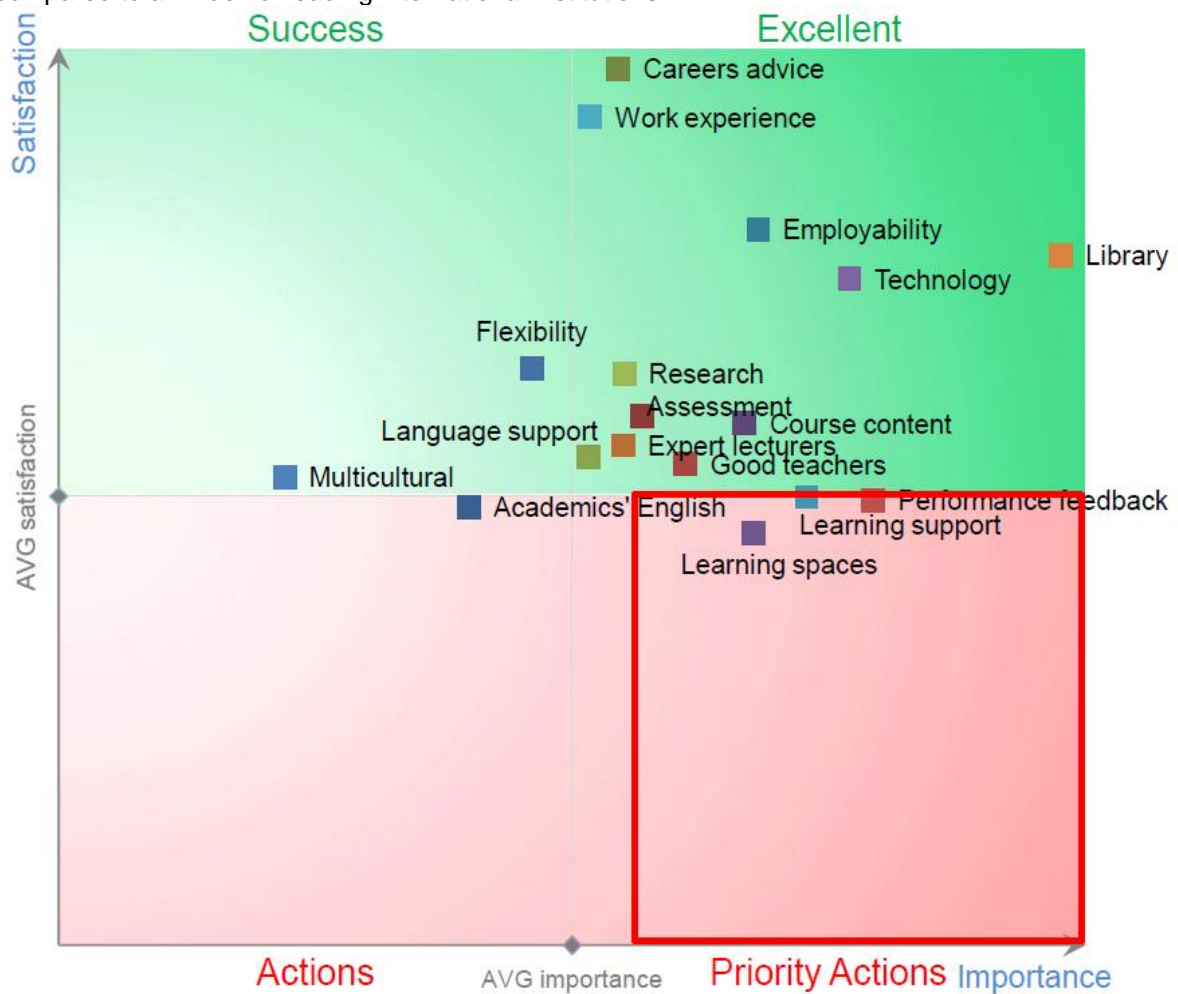
<sup>78</sup> Salmi, J., World Bank, 2009, The challenge of establishing world class universities <http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/547664-1099079956815/547670-1237305262556/WCU.pdf>

93. We have used data from the International Student Barometer survey to see how Russell Group institutions perform compared to some of their major global competitors.<sup>79</sup> This showed that Russell Group universities are currently performing well against their international competitors on almost all the aspects of student experience most valued by international students, such as good teaching, course content, and expert lecturers. (figure 4).
94. Yet the data also indicates key areas for improvement and investment. International students at Russell Group universities regard learning spaces as a key priority – more so than students within the index of global leaders - yet they appear to be marginally less satisfied with provision in this area than their peers at other leading institutions. Whilst Russell Group universities perform strongly against the index of global universities on elements of the learning experience such as employability and careers advice, overall levels of satisfaction in these areas are still significantly lower than in other aspects of teaching. Levels of student satisfaction with performance feedback are also relatively low both within Russell Group universities and the global-leaders' index.
95. If Russell Group institutions cannot make these improvements, and other international universities can, there is a risk that the strong competitive position of Russell Group institutions within this crucial market for international students will be threatened.

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<sup>79</sup> The International Student Barometer survey is a large-scale survey of international students carried out by the International Graduate Insight Group (IGRAD). This data provides an understanding of the key priorities for international students, and enables a comparison to be made between the levels of satisfaction of international students at Russell Group institutions, and those at a group of other leading universities around the world. We considered responses from undergraduate students only, at Russell Group universities and 13 other leading international universities. The thirteen institutions were chosen on the basis of institutions included in the ISB survey that also appeared within the top 100 institutions in the 2008 Times Higher Education World University Rankings.

**Figure 4:** Student satisfaction vs importance on learning indicators at Russell Group universities compared to an index of leading international institutions<sup>80</sup>

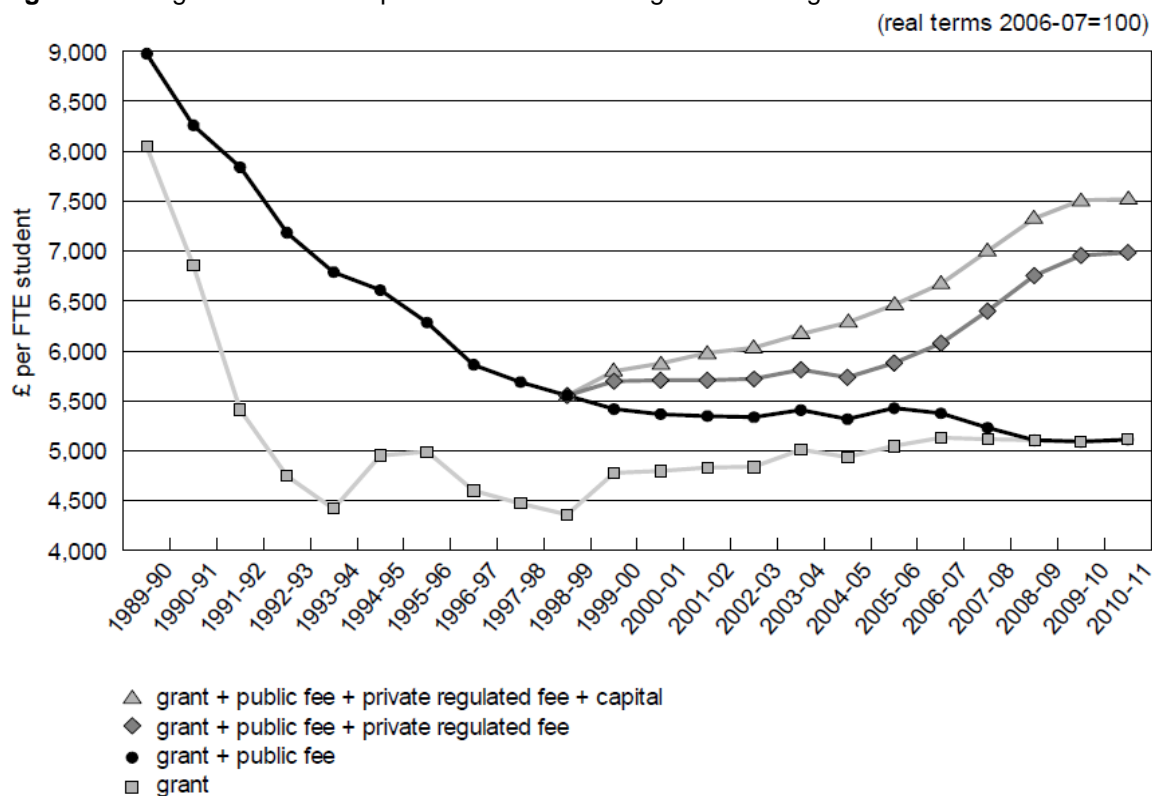


Investment through variable fees was necessary to address a backlog of under-investment

96. During the 1990s and early 2000s, the combination of a rapid expansion in student numbers together with static levels of public funding led to a serious decline in the level of funding per student, which threatened the long-term sustainability of much of the UK's higher education system. Between 1989 and 2005, the percentage of the relevant age cohort enrolling at university expanded from 16% to 43%. In the absence of a concomitant increase in funding, this led to a real-terms decline in funding per student of 40%, jeopardising the quality of education which universities were able to offer (see Fig 5).

<sup>80</sup> The figure shows a ratio, for each indicator, of the ratings for importance and satisfaction given by students within Russell Group universities vs those within the global leaders' index. A ratio of greater than 1 for importance therefore indicates that students at Russell Group institutions consider the indicator more important than those at the leading international institutions; a ratio of greater than one for satisfaction indicates that students at Russell Group Universities are on average more satisfied with a particular indicator. Indicators falling into the top-right segment therefore indicate areas which international students at Russell Group institutions both consider to be more important and are more satisfied than those at the group of leading international institutions.

**Figure 5:** Longitudinal view of planned unit of funding for teaching<sup>81</sup>



97. Over the last decade, reforms to the higher education system, and enhanced public funding, have improved the financial position of English universities in a number of important respects:

- a. The introduction of tuition fees, firstly a £1,100 flat fee, followed by the introduction of variable top-up fees to a maximum of £3,000 per annum, have significantly increased income to the higher education sector in England. HEFCE data shows that variable tuition fees have increased the sector's income by just under £1bn after the first two years. It is important to note, however, that the income from this source represents just 6%, on average, of the total income received by Russell Group institutions<sup>82</sup>.
- b. The unit of resource (average level of public grant plus public fee per student) has been relatively stable from 2000/01 onwards and the Government has committed to maintaining the unit of resource until 2010/11.
- c. Additional capital funding has been made available through the Capital Investment Fund, and similar programmes.

98. However, prior to the introduction of tuition fees, years of under-investment had created a significant resource backlog for institutions to address.<sup>83</sup> Therefore, whilst recent

<sup>81</sup> Figure reproduced from FSSG, *The sustainability of learning and teaching in English higher education*; a report prepared for the financial sustainability strategy group by J M Consulting; December 2008

<sup>82</sup> Source: HESA finance returns 2007/08; Table 5b: Income analysed by source (N.B: data is only available for 2007/08, before the full impact of variable fees has been realised)

<sup>83</sup> A 2002 HEFCE study concluded that there was a remedial infrastructure investment need of around £8bn across the UK HE sector, of which £4.6bn was specific to learning and teaching (HEFCE 2002/31 Teaching and Learning Infrastructure in Higher Education. Report to HEFCE by J M Consulting June 2002). The Capital Grants for Learning and Teaching, and subsequently the Capital Investment Framework, were introduced to help address this backlog.

investment has greatly improved the financial basis for higher education teaching in the UK, ongoing investments are required to maintain the progress that has been made in recent years.

Universities are committed to cost-effectiveness and efficiency, but this cannot compensate for under-investment

99. UK universities have a strong track record in increasing cost-effectiveness. During the period of under-resourcing in the 1990s, universities had to become more efficient to absorb some of the financial pressure. Cost savings worth millions of pounds were delivered through increased sharing of resources and equipment, better use of staff and space, and new economies of scale achieved through university growth and mergers.
100. Russell Group universities have been at the forefront of this efficiency drive, and continue to pursue innovative ways in which to deliver greater cost effectiveness and higher levels of productivity. For example, Russell Group universities in England are currently involved in a quarter of HEFCE's feasibility studies to investigate innovative uses of shared services and resources. Projects include an investigation by the Russell Group university IT directors into the possibility of a shared high-end data-centre, which would not only reduce costs associated with universities' high-performance computing requirements, but could also have significant environmental benefits.
101. Through these and other measures, Russell Group universities are committed to identifying opportunities to make further improvements in efficiency to ensure maximum return on the public and private investment in them. (We are happy to provide the review with further information and illustrative examples from our institutions). However, the extent to which efficiency savings can continue to be made without a negative impact on teaching quality or the international standing of the UK's leading universities is highly questionable.

## **2.2. Evidence indicates that the financial sustainability of the sector as a whole is severely at risk**

102. Data from the recent JNCHES review of HE finance and pay data show that the average institutional operating surplus is just 1-2%. Further analysis based on the TRAC -adjusted costs<sup>84</sup> even suggests a significant deficit. The report concludes that the higher education sector is largely sustainable in the short term, but that "the levels of surplus and investment of HEIs are too low confidently to assure a sustainable future".<sup>85</sup>
103. Universities will need to make significant additional investment in infrastructure and other resources to maintain the quality of their teaching in the long term, and their current funding levels are insufficient to allow them to do this. This threatens the quality of the UK higher education experience, and the international competitiveness of our institutions. In addition, the fact that universities also face significant cost pressures, particularly those related to pensions and rising salaries, which are likely to increase more rapidly than public funding, at the very least places their long-term financial sustainability at some risk.

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<sup>84</sup> TRAC is the accounting methodology used by higher education institutions (HEIs) in the UK for costing their activities. See HEFCE website for further details: <http://www.hefce.ac.uk/finance/fundinghe/trac> . TRAC requires adjustments to be made for the real cost of capital depreciation, and the cost of resources which institutions should plan to make available for future investment.

<sup>85</sup> JNCHES, Review of Higher Education Finance and Pay Data, Final Report, December 2008

104. As noted earlier, institutions have already reduced costs significantly through efficiency measures. However, further efficiency gains will not be sufficient to place universities on a long-term sustainable financial footing without severely compromising the student experience on which they currently compete. The report on the sustainability of learning and teaching in higher education produced by the Higher Education Financial Sustainability and Strategy Group (FSSG) concludes that the financial sustainability of the UK's higher education system could be assured by an "uplift in public funding to provide a level of resource to institutions...closer to the full economic cost of future sustainable teaching", and that "this would imply moving closer to the levels of resourcing that were available before the unsustainable expansion in the 1990s, or are seen in some competitor OECD nations".<sup>86</sup>

105. Research-intensive universities face particular cost pressures which result from a model of education which involves low student:staff ratios, top quality equipment and resources, and teaching by leading academics. Such costs are often particularly apparent in certain laboratory-based subjects such as Chemistry. As an example of the funding gap which many research-intensive universities may be faced with in teaching these subjects, the case study below provides a real example of the resource gap involved in teaching a Chemistry student at one institution:

#### **Case study: The costs of teaching 'Chemistry Student X' at one Russell Group university**

The following figures provide details of the income and expenditure involved in teaching a Chemistry student at one Russell Group university in 2007/08. The student:staff ratio for chemistry at the institution in question is just over 13.

- Cost of teaching (per undergraduate FTE): £14,190
  
- Income received per student:
  - Funding Council grant: £7,500<sup>1</sup>
  - Tuition fee: £3,070
  - *Total Income*: £10,570
  
- **Loss** = £3,620 per undergraduate FTE

<sup>1</sup> Based on HEFCE standard resource for Chemistry in 2008/09 plus various additional targeted allocations/weightings

106. The figures in the chemistry case study provide a powerful illustration of the costs which research-intensive universities currently bear in order to continue offering high quality teaching. Currently many universities manage those costs by subsidising from other income streams, such as income from overseas fees. However, such an imbalance in resources clearly poses a threat to the long-term of high quality teaching in many areas.

### **2.3. Financial forecasts for Russell Group universities predict**

<sup>86</sup> FSSG, *The sustainability of learning and teaching in English higher education*; a report prepared for the financial sustainability strategy group by J M Consulting; December 2008

## a serious deficit by 2013<sup>87</sup>

107. Both the FSSG report and the JNCHES analysis provide an overview of the UK sector as a whole. Moreover, they draw on finance data and forecasts made before many of the funding pressures created by the current economic downturn became apparent. In order to ascertain a more accurate and up-to-date picture of the financial sustainability of Russell Group institutions, we undertook, in August 2009, two analyses of cost balances across the group.

108. The Russell Group projections aim to show what the collective financial position across the Russell Group would look like if a variety of assumptions about changes in income and expenditure are applied. There are two versions:

**Version 1** - provides a relatively optimistic set of projections, based on changes to income and expenditure that are already known (apart from an assumption on pay).

**Version 2** – incorporates some more stringent assumptions about future income and expenditure streams, including cuts in funding from the research councils and funding councils which though not yet confirmed look feasible given the current funding climate.

### Results and conclusions from the data

109. **The forecasts indicate a severe decline in the funding level of Russell Group universities over the four years of the analysis.** Both analyses show a significant deficit emerging across the Russell Group, and an even greater deficit when measured against the full economic cost of ensuring long-term sustainability (Detailed methodology and results are shown in Annex B).<sup>88</sup>

- Version 1 shows a decline from an operating surplus of £76m (0.8% of income) in 2008/09 to a deficit of £471m (4.7% of income) in 2012/13.
- Version 2 shows an even more severe decline from an operating surplus of £76m to a deficit of £1,126m (12% of income) in 2012/13 (Figure 6).

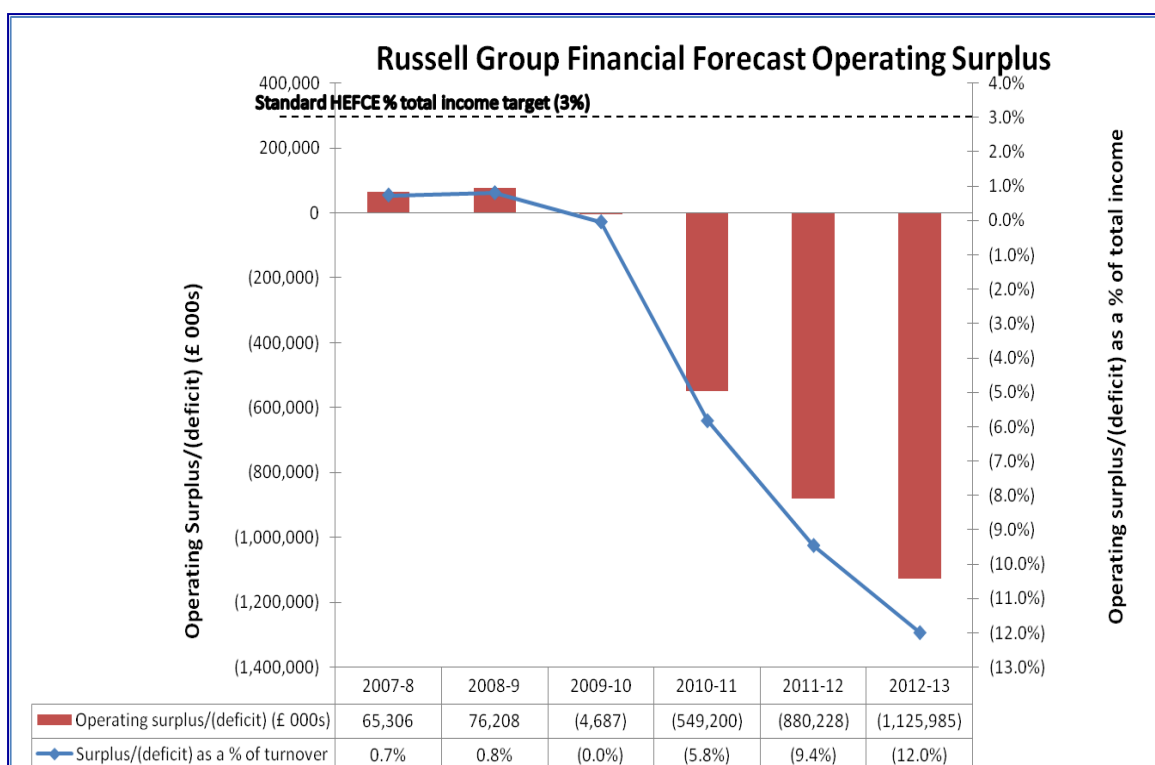
**Figure 6:** Operating surplus/deficits forecast for Russell Group universities – Version 2

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<sup>87</sup> The following section on financial forecasts for Russell Group universities is provided by the Russell Group Finance Directors, based on an analysis conducted in August 2009. We are very grateful for the work undertaken by the Finance Directors, and in particular for the important contributions to this section from Gill Ball (Finance Director, University of Birmingham), Jane Madely (Finance Director, University of Leeds), Marianne McKenzie (Finance Director, University of Manchester), Derek Pretty (Registrar, University of Bristol).

<sup>88</sup> As well as the actual operating surplus/deficit, the forecasts also show the adjustments made in accordance with Transparent Approach to Costing (TRAC) methodology (estimated at 7.7% of income as an average). This shows the full economic cost (fEC) of the deficits projected in each year, allowing for the levels of investment which universities *should* be making to ensure sustainability in the long term.





The forecast funding levels would have a severe impact on Russell Group universities

110. The deficits outlined would, in all likelihood, consume currently available reserves and cash balances. In that case, Russell Group universities could face severe difficulties funding investment in capital and infrastructure in the future. The deficits are too large to allow institutions to increase their borrowing. At the same time, cash-flow would not be sufficient to create funds for capital investment.

111. It is important to consider what action Russell Group institutions might have to take to remedy this level of annual deficits. Broadly, there are only three ways in which they might realistically be able to do this<sup>89</sup>:

- Reducing costs by cutting staff numbers
- Increasing income through an increase in home U/G fees
- Increasing income through an increase in overseas fees

112. Clearly none of those options would or could be adopted in isolation, however, considering the predicted deficit in these terms gives some indication of the scale of change required in order to address the funding shortfall predicted by the models.

113. Reducing this deficit to the level of operating surplus recommended by HEFCE would require a reduction in costs equivalent to cutting thousands of staff across the Russell Group. Alternatively, eliminating the deficit would require an increase in income equivalent to a very significant increase in home/EU fees.

114. Fees paid by international students have become an increasingly important income source for UK universities in recent years, and increasing income from this source has been suggested to be a way through which universities might remedy an emerging shortfall in public funding. However, the scale of deficit which the analysis predicts is

<sup>89</sup> A subsequent Russell Group paper will explore in more detail some of the potential options that are available to increase income from these sources.

such that eliminating it would require a per annum increase of more than 200% in income from international students. Even the most optimistic projections on international student income would fall far short of this level. Russell Group universities might be able to increase revenues by raising fees from international students, but pushing such a strategy too far could be risky, endangering the reputation of UK universities overseas and ultimately placing in jeopardy the stability of the UK international student market.<sup>90</sup> Given this context, it is clear that, although income from non-EU students will continue to be an important revenue source for Russell Group universities, it cannot be relied upon as a solution to the financial difficulties we predict they will face over the next few years.

115. The above projections take no account of the actions which most universities have been considering over the last year in order to secure financially sustainable futures. Most Russell Group universities have already identified the need to make significant cost reductions in preparation for difficult times ahead, and many are well on the road to achieving initial targets through implementing voluntary redundancy packages and other cost-saving programmes.

116. These Russell Group financial forecasts show the severity of the financial pressures which universities are facing, and the scale of the cost reductions that might be required to assure a sustainable financial future. Moreover, the higher education sector is already facing significant additional cuts in funding, with a £135m cut in funding for English universities announced in the HEFCE grant letter of December 2009. This comes on top of £600m of efficiency savings across the higher education and science budgets. Whilst we welcome the relative protection of research budgets, and the pronouncement that the needs of world-class universities must be prioritised, the scale of these funding cuts is very concerning.

117. Russell Group universities will continue to identify areas where cost saving efficiency gains can be made, as has been reflected by the voluntary redundancy schemes and other cost saving programmes which many institutions have implemented or are considering. However, there is a limit to how far gains in efficiency can be made before staff reductions or reduced investment in infrastructure (such as libraries, accommodation and other facilities) begin to have a severe impact on the student experience, and eventually on the international reputation and success of the university.

#### **2.4. The high cost of the current system largely results from excessively high subsidies: addressing the interest rate and repayment rate and threshold would improve sustainability.**

118. The current system of loans provides all students with an income contingent loan to cover the full cost of their tuition fees (currently set at a maximum of £3,225). Loans begin to be repaid once graduates are in employment, at a rate of 9% on income earned above £15,000. Debt is written off after 25 years, so low-earning graduates do not face a lifetime of debt repayments.

119. The system is one of the most generous in the world, providing all students with in-built insurance against spiralling debt and inability to repay. Therefore, it is also immensely costly, includes excessive and unnecessary subsidies supported by the taxpayer, and includes some regressive features. In 2007, the then Department of

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<sup>90</sup> Professor Bone's report notes a perception which already exists among international students that UK universities are only interested in them as an additional revenue source. A significant hike in overseas fees in order to address a shortfall in other income sources could exacerbate these perceptions

Education and Skills estimated that the cost of the in-built subsidies in the current loan system would be approximately £1 billion in 2006/07; over a quarter of total lending to students in England in that year.<sup>91</sup> Similarly, we estimate that middle-income graduates currently receive a subsidy of almost 30% on their combined tuition fee and maintenance loan.

120. This expensive subsidy derives principally from two elements of the current system. The first is the write-off of debt after 25 years. This amounts to a substantial subsidy but one which is specifically targeted towards low lifetime earners, and aims to protect them from lifelong debt repayments. The second major source of the subsidy is the lack of a real interest rate, which means that graduate debt increases only in line with inflation, whilst the taxpayer pays for the actual cost of borrowing. In contrast to the debt write-off, this subsidy benefits primarily middle and high earners. As shown below, this particular subsidy is therefore both inefficient and regressive.
121. Figure 7 shows the subsidies currently received by three quintiles of graduate earners<sup>92</sup>. It clearly demonstrates the substantial subsidies that are realised by the better-off graduates from the current lack of a real rate of interest. Graduates in the lower quintile have their debt written off after 25 years, and so are unaffected by the interest subsidy.
122. The lack of a real rate of interest on student loans is therefore a subsidy which imposes high costs on the Government, and which exceeds the requirements of ensuring fair access to higher education (for reasons discussed above). Moreover, it is a subsidy which is targeted towards better-off graduates. As it represents a re-distribution of funds from the worse off to the best off, it is therefore a highly regressive policy.<sup>93</sup>
123. One way of modifying the current system is therefore that student loans should carry a real rate of interest; one which would be equivalent to the Government's overall cost of borrowing. This would introduce significant cost savings for the Government and the taxpayer, while at the same time rendering the loan system more equitable by re-directing the subsidy away from the highest earners (fig 7). There are several mechanisms for introducing a real rate of interest including the idea of a 'surcharge' or an additional fee which will compensate, on average, for interest charges. This system is used in Australia and is described in Box 2. The New Zealand system described in Box 1 involved levying an actual interest charge. We are happy to provide further information about some mechanisms for introducing a real rate of interest.

**Box 1: Targeted interest subsidies in New Zealand**

A system of targeted interest subsidies was a feature of the student support system in New Zealand between 1992 and 2000. Student loans carried a real rate of interest equivalent to 1% above the Government's cost of borrowing. However, if a student's income was low enough that income-linked repayments were insufficient to cover the interest on the loan, then the loan was adjusted so that real debt remained static. Students could therefore be confident that low levels of income in the early years following graduation would not result in their debt rising.

<sup>91</sup> Department for Education and Skills Annual Report, 2006/07

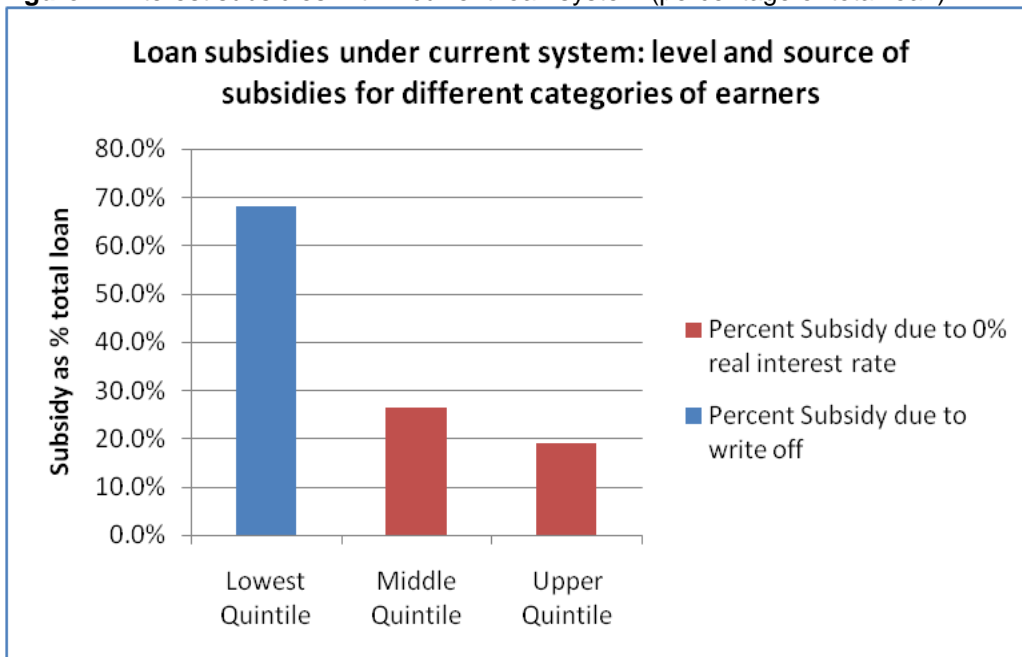
<sup>92</sup> We are very grateful to Nicholas Barr and Alison Johnston for their kind permission to use their calculations of salary paths for lower, middle and upper quintiles of graduate earners (see Nicholas Barr and Alison Johnston, *Interest Subsidies on Student Loans: A better class of drain*; London School of Economics, *Forthcoming*. Quintiles derived from author's own calculations based on salary path data).

<sup>93</sup> See Barr N.A (2004) Higher Education Funding (online). London LSE Research Online; Nicholas Barr and Alison Johnston, *Interest Subsidies on Student Loans: A better class of drain*; London School of Economics, *Forthcoming*.

**Box 2: An additional charge to replace a real interest rate**

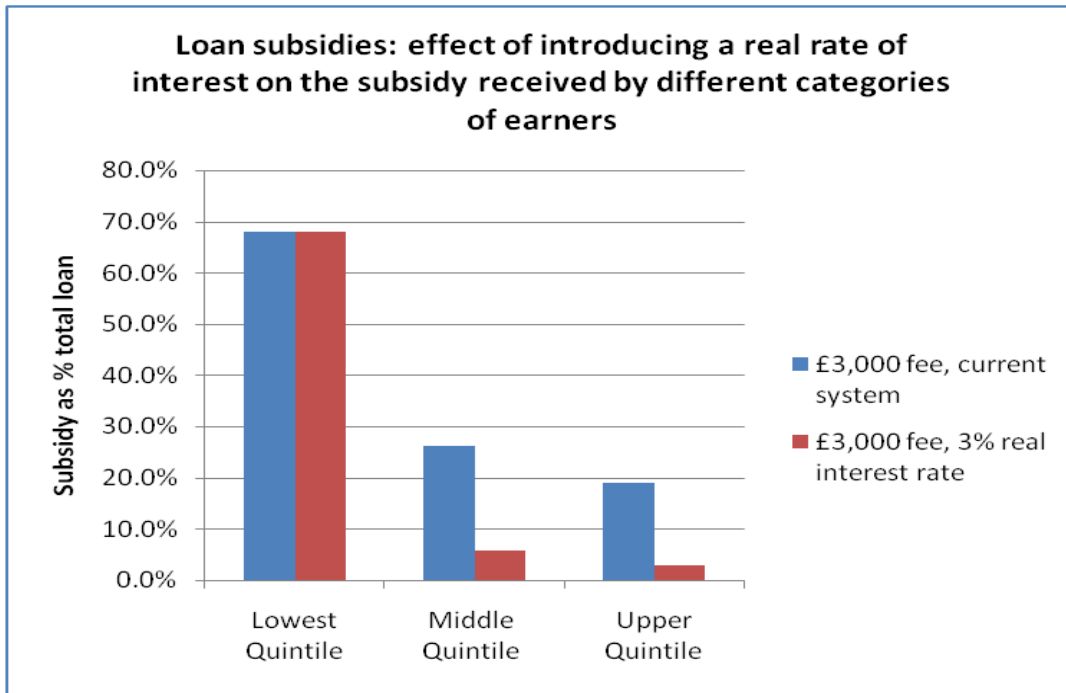
The Australian system of tuition fees incorporates a different mechanism of compensating for the interest rate subsidy. Rather than applying a real rate of interest, student loans are allowed to increase only in line with inflation. However, students who take out a Government loan to pay for their tuition fees are required to pay an additional charge, or surcharge, on top of the baseline tuition fee. This is calculated, on average, to compensate for the lack of interest rate. Students have the option to pay their fees up-front, in which case the surcharge is discounted from the fees they pay.

**Figure 7: Interest subsidies within current loan system (percentage of total loan)**



**Figure 8: The effect of introducing a real rate of interest<sup>94</sup>.**

<sup>94</sup> The model shown illustrates a system with a real rate of interest matching the Government's cost of borrowing, but which retains targeted interest subsidies for low earners. See Annex C for more detail on different mechanisms to introduce a real rate of interest to the loans system.



Costs can be reduced further by increasing repayment rates and lowering repayment thresholds

124. A major contributing factor to the size of the loan subsidy is the rate at which graduates are required to pay back their loans: the lower the rate of repayment, the longer a graduate will take to repay their debt, and where subsidies – both targeted interest rate subsidies and the 25 year write-off – continue to exist, lower repayments over a longer duration will increase the overall level of subsidy.

125. Costs may be reduced further by increasing the rate at which graduates repay debt. This can be done in one or both of two ways:
- a. Increasing the proportion of income which goes towards paying back the loan (currently 9% on income above £15,000)
  - b. Reducing the threshold above which loans begin to be repaid (currently £15,000 per annum)

126. Increasing the rate of repayment will have an impact on the size of the contributions made by the lowest, as well as the highest earners. However, it might be argued that the current repayment rate is generous, and that it might reasonably be increased without putting undue pressure on low earners. (Modelling of the impact of a small change in repayment conditions on graduates in various salary bands is available on request).

127. Modelling the impact of these changes shows the savings which the Government would stand to make, per student, within each earnings quintile. Assuming a real interest rate to match an assumed Government borrowing rate of 3% (with RPI at 1.5%) the savings which the Government could make per student are summarised in Table 2. This shows both the savings made by introducing a real rate of interest, and those achieved by increasing the repayment rate and lowering the repayment threshold.

**Table 2:** Savings per student associated with proposed changes

|  | Lowest Quintile | Middle Quintile | Upper Quintile |
|--|-----------------|-----------------|----------------|
|  |                 |                 |                |

|                                                                       | Value Subsidy | Savings over current system | Value Subsidy | Savings over current system | Value Subsidy | Savings over current system |
|-----------------------------------------------------------------------|---------------|-----------------------------|---------------|-----------------------------|---------------|-----------------------------|
| <b>£3,000 Fee, Current System</b>                                     | £16,079       | £0                          | £5,316        | £0                          | £3,859        | £0                          |
| <b>£3,000 Fee, 3% real interest rate</b>                              | £16,079       | £0                          | £1,184        | £4,132                      | £604          | £3,255                      |
| <b>£3,000 Fee; 3% real interest rate, repayment 12% above £12,500</b> | £9,815        | £6,264                      | £668          | £4,648                      | £400          | £3,459                      |
| <b>£3,000 Fee with 20% surcharge; repayment as above</b>              | £9,815        | £6,264                      | £1,520        | £3,796                      | £92           | £3,768                      |

128. The overall cost of non-repayment for the Government is currently estimated as 33p on every £1 lent to students<sup>95</sup>; a cost which Nicholas Barr has estimated is split roughly 1/3<sup>rd</sup> to 2/3rds between the interest rate subsidy and debt write-off<sup>96</sup>. Removing the interest subsidy entirely could therefore create savings of 22p on every pound lent. Increasing the repayment rate creates further savings by reducing the debt write-off subsidy, though it is more difficult to make a useful estimate here since savings would depend on the actual numbers of students qualifying for some debt-write off. The figure above shows that the subsidy would be reduced by almost 40% for an average student in the lower quintile of earners.

129. Therefore, the current system of student support could be made more sustainable through addressing some of the poorly targeted and excessive subsidies provided. We will also be making available to the Review more extensive Russell Group analysis of options for improving the current system of higher education funding and student support.

<sup>95</sup> HEPI (2008), *Funding higher fees – some implications of a rise in the fee cap*

<sup>96</sup> Nicholas Barr (2004), *Higher education funding*, Oxford Review of Economic Policy, Vol. 20, No. 2, Summer, pp. 264-283.

## **Annex A: How Russell Group universities are using income from fees to improve the quality of the student experience – a selection of case studies**

The following case studies illustrate some of the ways in which Russell Group universities have invested in high quality teaching, infrastructure and facilities to improve the learning experience of their students.

### **Case study 1: Investing in a high tech, enhanced learning experience – University of Sheffield**

The University of Sheffield earmarked over £2.3m of investment to develop enhanced student facilities ahead of the introduction of variable fees. The 'University of Choice' project invested in important new infrastructure and services in response to opinions from student surveys: areas of expenditure included library book purchases, disability services, club sport, volunteering activities, improvements in lecture theatres, the replacement of audio-visual equipment, and investment in student-facing IT provision.

One of Sheffield's most impressive investments in enhanced, technology-based learning is the 'Information Commons' which opened in 2007. The information commons is a joint venture between the university's IT services and the Library, which brings together a wide range of different study spaces and facilities within a single building. Its primary aim is to deliver IT-enhanced study areas. As well as offering a flexible space for independent learning, the information commons also offers resources for innovative teaching, with high-tech classrooms for staff who wish to develop their individual teaching style. While the business case for the IC was approved before significant income from variable fees was available, the case reflected the importance of creating and maintaining a world-class student learning environment in an era of higher fees.

### **Case Study 2: Using tuition fee income to invest in sustainable infrastructure – University of Leeds**

The University of Leeds has used income from variable fees to fund much-needed investment in repairing and upgrading its infrastructure and facilities.

A large proportion of the University's estate was constructed in the 1960s and 70s and in consequence, many of the buildings required major maintenance. Prior to the university's investment programme, much of the university's estate had not had a major upgrade for over 30 years.

Income from variable fees, combined with HEFCE infrastructure funding, gave the university the confidence to embark upon a major programme of capital investment. One of the key principles was to provide first class facilities and ensure long term sustainability of the estate.

The result of the investment in infrastructure has been a much improved estate and a better student experience. Three quarters of the estate is now rated 'excellent' or 'good', compared to just two thirds in 2007/08, with an accompanying reduction of £28M in backlog costs.

The university notes: *"Whilst the University has made a significant step change in the quality of its estate, there are concerns that without continuing funding for backlog maintenance and fitness for purpose, we will again find ourselves with a growing sustainability problem."*

### **Case study 3: Supporting students through a comprehensive and widely advertised bursary scheme – the University of Nottingham**

As well as simply devoting some of their additional fee income to bursaries, Russell Group universities invest in a wide range of widening access and outreach activities to ensure students are fully informed and can take advantage of the financial support on offer.

The University of Nottingham was one of the universities recently highlighted in a report for the Office for Fair Access, which highlighted examples of best practice among universities in increasing awareness and uptake of bursaries and scholarships.

The University offers students a generous bursary of up to £1080 p.a. It has devoted considerable resource to advertising bursaries to its students and improving uptake, which has helped improve recruitment and retention among widening participation groups.

Among the initiatives which the university has adopted are:

- Conducting several student surveys to assess the effectiveness of its bursaries: results have informed the level, mechanism of administration, and advertising strategy for its bursaries.
- Developing a dedicated bursary portal on its website which, among other services, allows students to calculate the amount of bursary they are entitled to.
- Together with Nottingham Trent University, providing ‘family suppers’ for students in years 10 and 11 and their parents, during which they are given information about attending university, including the bursaries and other financial support available
- Providing bursaries and additional support specifically for students leaving care and Foyer residents. For these students, the university provides a dedicated contact within student support services, who contacts each student every term to ensure they are getting the support to which they are entitled.

### **Case study 4: Supporting outreach activities – Newcastle University**

Newcastle University has used income from fees to support its generous bursary scheme, offering financial support to students of up to £2,250 pa at an estimated cost of £14m over 5 years.

But income from fees has also allowed the university to invest heavily in outreach and widening participation initiatives, in which it has invested £5m over five years. One of the initiatives which this investment has supported is the establishment of a network of over 100 student ambassadors, to support undergraduate and graduate outreach, widening participation and recruitment activities, both on and off campus. In 2007/08 graduate student ambassadors undertook 114 visits to 102 different schools and colleges, involving around 14,000 students.

The university has also been able to extend its university partners programme to involve over 100 schools. The programme promotes awareness of the university among school students and helps the university increase recruitment among pupils in local schools.



### **Case study 5: Investing in support for students with disabilities – UCL**

University College London has invested heavily in creating a comprehensive package of support services for students with disabilities. Among the services which it offers, the Student Enabling IT Suite provides a wide range of software and hardware to assist students with disabilities with their studies. The facilities available include:

- *Dragon Naturally Speaking*: a speech recognition programme which allows voice-activated typing
- *Inspiration*: a programme which allows students to create a visual representation of their thoughts on screen and translates them into an essay format
- *A Braille translator*: software which translates print from a word document into Braille format
- A Braille embosser, which allows Braille text to be printed

The Student Enabling Suite is one of a number of services which UCL offers to improve the teaching and learning experience of its students with disabilities. For example, the university also runs a dyslexia centre which provides free disability assessments for both home and international students.

These and other services involve substantial investment in student services which may not have been sustainable in the absence of additional income from fees.

### **Case study 6: Improving learning facilities and spaces for students – University of Bristol**

The University of Bristol has used income from variable fees to invest in a number of key facilities and infrastructure developments to support a high quality student experience.

- The *JobShop* is an initiative run by the University's careers service. It is a dedicated portal which advertises term time and vacation job opportunities to current students, based on the university campus itself and with local employers. Employers can also engage with the service to advertise opportunities and improve their profile and visibility with the student population. Students benefit from developing important work experience, the opportunity to earn extra cash, and can access from the JobShop information on finding the right position, and on their entitlements as part-time employees.
- The University has funded a major refurbishment of the Arts and Social Sciences library, and the Medical sciences library. Improved services include new social learning and group learning areas, a quality refreshments area, and new learning technology equipment. In the near future, refurbishment in the Arts and Social Sciences library will be augmented by the opening of a newly equipped assistive technology room for learners with disabilities specific learning difficulties. Student feedback has been positive, with the majority of respondents on the University's feedback survey supportive of the changes.
- Since 2005, the University has engaged in an innovative e-learning scheme. Income from variable fees has made an important contribution to the scheme, helping the University invest in new and engaging learning programmes such as the 'Wimba Collaboration Suite' a suite of programmes which have added voice and chat tools to the Universities' existing e-learning programme, 'Blackboard', helping to engage student learners.

### **Case study 7: Creating an integrated student services hub – King's College London**

The Compass at King's opened in October 2008, following a £1m investment in improving the student experience.

The Compass provides a core team of 10 advisors who can provide help and assistance to students from all of the university's campuses on areas such as student loans, Council tax exemption letters and issuing replacement ID cards. The Compass also hosts fly-in seminars from members of the universities other student support teams, including student advice and international student support, student funding, equality and diversity and the graduate school. The re-location of the university's careers service to the same floor has also placed careers at the heart of student services.

Since opening, the university has handled over 96,000 enquiries from students, and from February 2009 this process has been made even easier, with the launch of a new online service which allows students to make remote enquiries and to track progress online.

According to the university: *"Fee income is a vital element of our business planning", which underpins investment to improve the student experience.*

## Annex B: Methodology and results of financial forecasts for Russell Group universities

1. The Russell Group forecasts are based on projecting the impact of predicted trends in university income and expenditure on the finances of Russell Group universities, starting from their current financial position. To provide a baseline, data was collected from Russell Group members based on their reported income and expenditure in 2008/09. This data was then aggregated to produce a collective Russell Group position which was rolled forward for the period 2009/10 to 2012/13 based on an agreed set of assumptions about future income and expenditure streams.<sup>97</sup>
2. The Russell Group projections aim to show what the collective financial position across the Russell Group would look like if a variety of assumptions are applied. There are two versions:
3. **Version 1** - provides a relatively optimistic set of projections, based on changes to income and expenditure that we know will happen (apart from an assumption on pay). It therefore includes only:
  - The Russell Group share of the £180m cuts in the funding for English institutions which HEFCE has been asked to make.;
  - no cuts in Research Council funding;
  - pay awards of 1% in 2009/10 and 2% pa thereafter;
  - a 2% increase in contributions to the USS pension scheme, with effect from 1 October 2009.
4. **Version 2** – incorporates some more stringent assumptions about future income and expenditure streams, which include cuts in Research Council funding and support from the funding council. These are summarised here, and shown in full in Annex A:
  - The Russell Group share of the £180m funding reductions for English institutions
  - 5% reduction in RCUK funding in 2010/11 and 2011/12, no growth in 2012/13.
  - 10% reduction in total HEFCE grant in 2010/11 and a 5% reduction in 2012/13
  - 2% on USS contributions in 2009/10 and 2012/13.
  - 2% on SAT pension scheme contributions in 2010/11.
  - An increase in National Insurance contributions of 0.5% from April 2011
5. Full details of the steps taken to put together the forecasts, including the detailed assumptions and the impact on institutions, is available on request from The Russell Group.
6. As well as the actual operating surplus/deficit, the forecasts also show the adjustments made in accordance with Transparent Approach to Costing (TRAC) methodology (estimated at 7.7% of income as an average). This shows the full economic cost (fEC) of the deficits projected in each year, allowing for the levels of investment which universities *should* be making to ensure sustainability in the long term.

### Results and conclusions from the data

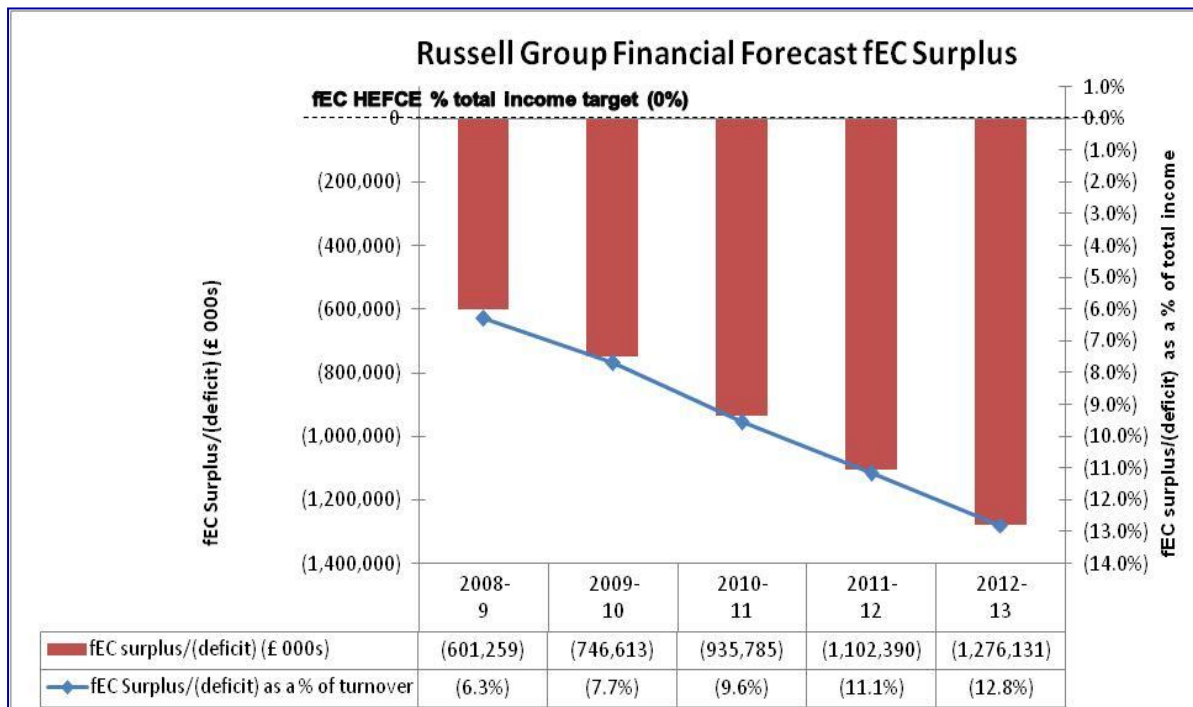
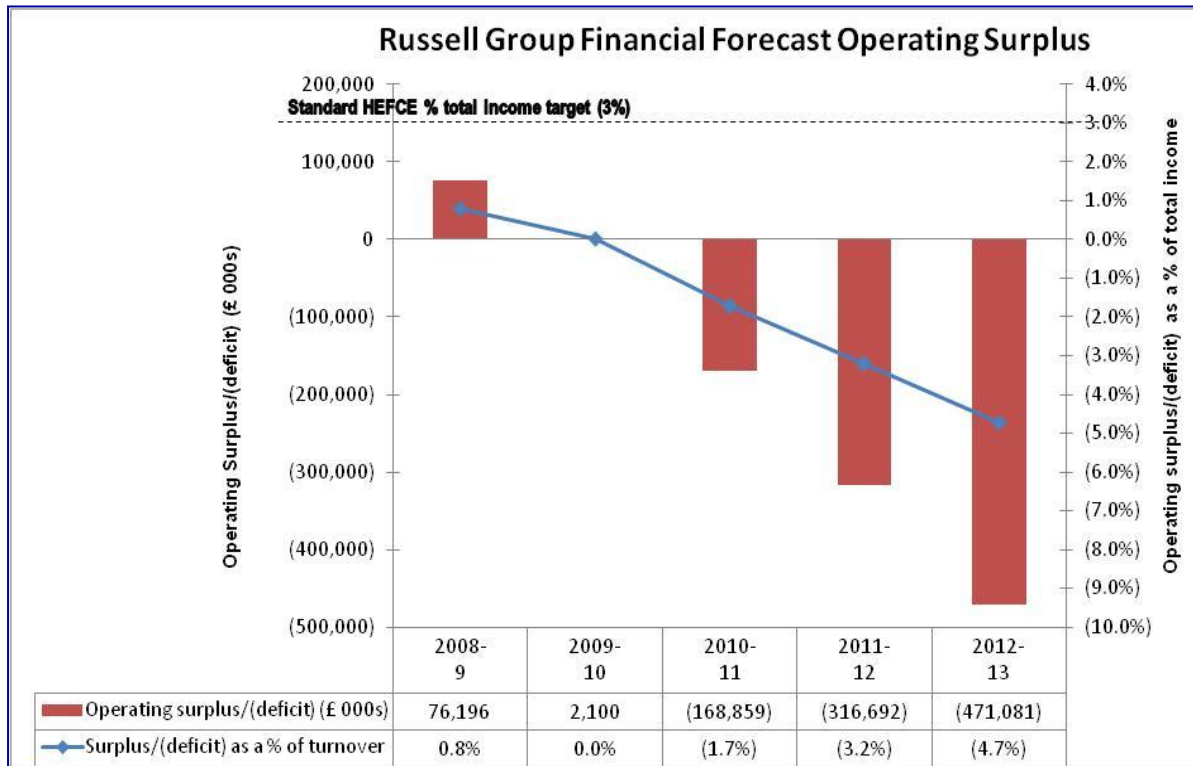
7. **The forecasts indicate a severe decline in the funding level of Russell Group universities over the four years of the analysis.**

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<sup>97</sup> The data originally excluded 4 universities who are outside of the English funding system and 3 English universities who did not submit their figures. However the forecasts have been modified to try and reflect the missing institutions and produce an aggregated Russell Group position. This involved increasing the values in the baseline data by 41.5%, based on the latest reported turnover of the missing institutions.

8. Version 1 shows a decline from an operating surplus of £76m (0.8% of income) in 2008/09 to a deficit of £471m (4.7% of income) in 2012/13.
9. Version 2, with more stringent assumptions on future income and expenditure levels, shows an even more severe decline from an operating surplus of £76m to a deficit of £1,126m (12% of income) in 2012/13.
10. Figures 1 and 2 illustrate the results for the operating surpluses / deficits and fEC deficits for Versions 1 and 2 respectively.

**Figure 1: Operating surplus/deficits forecast for Russell Group universities – Version 1**



**Figure 2: Operating surplus/deficits forecast for Russell Group universities – Version 2**

