

Modernisation of Higher Education in Europe: The EU Contribution

University Alliance response, November 2011

1. This response is intended to inform thinking in relation to the role the EU can play to support higher education in order to maximise the impact on jobs, growth and innovation.
2. The role of universities in driving growth and innovation is a significant issue for University Alliance, a group of 23 major, business-engaged universities committed to delivering world-class research and a high quality student experience. Our aim is to deliver evidence-based policy and research and foster close links with Government and business in order to improve higher education policy for the benefit of the economy and society.
3. We note that education is a Member State competency and that, as the Call for Evidence highlights, this means the EU's role in this area is to encourage cooperation and to support and supplement the actions of Member States if necessary. While others will undoubtedly consider this aspect in more detail in their submissions we will focus primarily on the role of universities towards growth, jobs and innovation. In this submission we highlight the evidence to support investment in this area, the continued and growing need for graduate level skills and the role of business engagement towards these goals.

Strategic backdrop: Europe 2020

1. How can EU intervention most effectively help higher education to contribute to the EU's Europe 2020 ambition to boost EU jobs, growth and innovation?

4. Europe 2020 set out some important and ambitious goals for Europe against a backdrop of financial crisis back in 2010. Europe 2020's recognition of the central role of knowledge and innovation towards "smart growth" is critical, particularly for the UK where our universities are a great strength of our economy.
5. This is not just about seeking further investment in universities. In many cases realising potential is about recognising existing investment in a significant area of strength for the UK economy, then mapping it across government priorities beyond the education and skills system.

6. In our publication, *21st Century universities: engines of an innovation-driven economy*¹, we drew together a wide range of evidence to form six key findings with relevance for this inquiry:

1. Innovation is a key driver of growth and productivity.

- a. Recent research has confirmed that innovation and high-tech approaches are the most likely to be successful in driving economic recovery and economic growth in the UK economy.
- b. Innovation was responsible for two-thirds of productivity growth between 2000-2007 and was the common defining feature of the fastest growing 6% of businesses between 2002 -2008. These businesses generated half of all new jobs created during this time.

2. Human capital (particularly graduate-level skills) is now the primary indicator of future economic growth.

- a. The proportion of our working population with graduate-level skills, along with our science and research base, will determine the pattern of our future economic growth and our ability to achieve the innovation-based economy that we are striving for.
- b. A graduate contributes between 20 and 48 per cent greater productivity to the labour market than employees holding lesser qualifications.

3. There is an increasing shortage of graduates, not saturation, and there is still a significant 'graduate premium' attached to obtaining a degree.

- a. The UK economy is not presenting any of the labour market signals that would suggest there are too many graduates in the economy. Graduate vacancies continue to grow, there is an increasing proportion of skilled jobs in the total workforce and there is still a significant graduate premium.

4. If we stand still we will fall behind – our global competitors are continuing to invest heavily in universities despite their own budget deficits.

- a. In 2000, the UK was 3rd amongst top industrialised nations in terms of the proportion of young people graduating. In 2008 we had fallen to 15th position because our competitor countries have been investing at a faster rate than us.
- b. We have to consider carefully the consequences of continuing to move down this ranking in terms of our international competitiveness.

¹ University Alliance, *21st Century Universities: engines of an innovation driven economy, how do we reduce the fiscal deficit without damaging growth?* September 2010 <http://www.university-alliance.ac.uk/wp-content/uploads/2011/09/21st-Century-Unis-new-final.pdf>

5. **Universities have a vital role to play in re-balancing the future economy, both in terms of sectors and regions.**
6. **Those universities with high levels of business engagement are well placed to build on established partnerships with business and new industries.**
7. In this sense the EU is providing a strong evidence-based steer which should be supported. In particular, the strategy's recognition of intensifying global challenges is important background:

“Europe will continue to benefit from being one of the most open economies in the world but competition from developed and emerging economies is intensifying. Countries such as China or India are investing heavily in research and technology in order to move their industries up the value chain and ‘leapfrog’ into the global economy.”²
8. The strategy clearly recognises that achieving an innovation-based economy will require increased investment in higher education, science and research – a fact widely recognised by our international competitors. Without this investment in the building blocks of innovation, we face a downward spiral of economic competitiveness.
9. Following the publication of the Government's White Paper, *Higher Education, Students at the heart of the system*³, the UK higher education sector is undergoing significant change. The EU communication and 2020 Strategy draws us back to the core of the issue. Whilst the scale of our fiscal deficit means that sources of public investment will be constrained for the foreseeable future, it is critical that we seek to secure the total investment to higher education (both public and private) in order to ensure that any reduction in public investment does not harm the future growth of our economy

2. How can the EU add value to the development and success of the Bologna Process and the European Higher Education Area?

10. It is important to recognise that the Bologna Process incorporates countries and organisations beyond the EU. Bologna is a process that aims to move forward through collaborative consensus, with acknowledgement of the value of university autonomy as a central feature. This can mean that progress appears slow but the advantages are that developments are firmly rooted and owned by participants.

² Europe 2020: A strategy for smart, sustainable and inclusive growth, COM (2010) 2020

³ BIS, Higher education, Students at the heart of the system, June 2011 <http://discuss.bis.gov.uk/hereform/white-paper/>

11. It is perhaps inevitable that there is some overlap between the goals of the Bologna and the ambitions of Europe 2020. It will be important for the Commission to be aware of these and to seek ways in which joint efforts may be harnessed to greater effect whilst not overstepping its competence.

Mobility

3. How can the mobility of students and researchers be boosted, and how specifically can a more diverse body of students be encouraged onto the Erasmus?

12. The UK performs well as a 'receiving country' but does not perform well as a 'sending country' in terms of the mobility of students and researchers. As has been well documented, this would seem to be largely due to financial and language barriers exist together with a lack of knowledge on the benefits of studying abroad.
13. The inclusion of work placements in the Erasmus scheme is something that is welcomed by the UK HE sector and evidence shows that it has had increased sign up since its introduction in 2007. Between 2007/08 and 2008/09 there was a 25% increase in participation in Erasmus work placements according to the British Council. This compares with an overall increase in Erasmus mobility of 6%.
14. The value of work placements as part of a degree programme is of particular interest for Alliance universities, with 10% of students at these universities undertaking 'sandwich courses' compared to a sector average of 6%. Experience of work during not only facilitates graduate employment but can also build valuable skills that support employability more generally.
15. A HEFCE commissioned report found that, "a benefit of structured work experience is improved employment outcomes after graduation."⁴ The report went on to say that, "the priority for activity/interventions by the HE sector should therefore be to support work experience placements for students during their period of HE study so that they develop the employability skills employers require and begin to build a body of work experience in advance of entering the employment market proper".
16. We know that employers value this experience but much more could be done to get this message across to students. The opportunity to study abroad needs to be publicised more widely especially to prospective students through UCAS and information and guidance received. Erasmus could support this by encouraging the use of student ambassadors and employers to speak about their experiences and highlight the value of this scheme.

⁴ Increasing opportunities for high quality higher education work experience, Report to HEFCE by Oakleigh Consulting Ltd and CRAC (2011) http://www.hefce.ac.uk/pubs/rereports/2011/rd07_11/

17. A further way in which work placement opportunities might be expanded would be by developing a network of approved work placements across Europe with a central support for universities / students to identify these opportunities and make contact.

Targets and league tables

4. How desirable is the EU's target that, by 2020, 40% of young people should successfully complete higher education or equivalent studies?

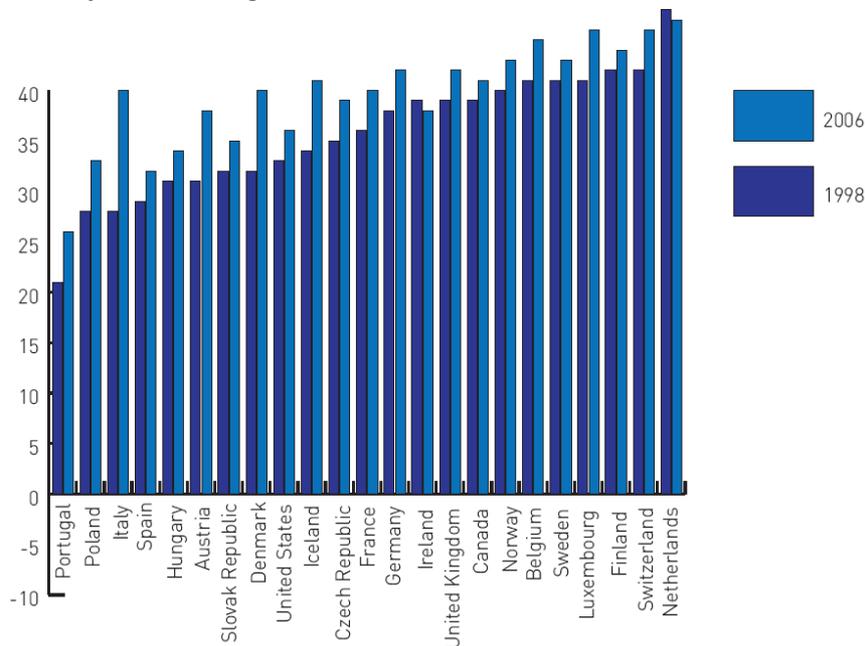
18. A highly educated and skilled workforce are essential components of growth potential. They enable people to find employment, create high value goods and services within a knowledge based economy and to deliver high quality public services. They also contribute to social mobility and fairness.
19. Over recent years we have seen an increase in press coverage and commentary describing an oversupply of graduates, especially following the 50% participation target introduced by Labour in the UK. However, a look at the evidence tells a different story, there is actually likely to be an increasing shortage of graduates, not saturation.
20. A recent report out today by the Higher Education Careers Services Unit (HECSU) showed a significant fall in graduate unemployment. The annual report, *What do Graduates Do?*, showed that six months after finishing their courses, 69.7 per cent were in employment – a 7.9 per cent increase on last year. The report also says that 63.4 per cent of respondents had graduate-level jobs, an improvement of almost 10 per cent on the previous year.⁵
21. Despite coverage to the contrary, this recent data only adds to significant evidence that far from there being a saturation of graduates, there is an increasing shortage of graduate-level skills:
- The UK economy is not presenting any of the labour market signals that would suggest there are too many graduates in the economy. Graduate vacancies continue to grow, there is an increasing proportion of skilled jobs in the total workforce and there is still a significant graduate premium.
 - IFS projections of earning profiles for graduates compared to non-graduates demonstrate the 'graduate premium' graduates receive in higher average salaries. The pattern of normal distribution of salaries is similar but there is a significant difference in average earnings between graduates and non-graduates.
 - When the most recent economic crisis hit. The youngest were hit hardest, and the lower educated were substantially more vulnerable than the more highly educated.

⁵ http://www.prospects.ac.uk/assets/assets/documents/wdgd_2010.pdf

- The net present value (NPV)⁶ for graduates in the UK is not only one of the highest across the OECD but it is still increasing in terms of the increased earnings advantage and employment advantage over non-graduates. This indicator shows no sign of the over-supply of graduates.
 - In terms of the proportion of graduates in non-graduate jobs, OECD have demonstrated that “under-employment” in the UK is under the natural level of around 25% of graduates. With more than three-quarters of all graduates in high-skill employment, it is difficult to conclude that we have yet reached a saturation of graduates to the labour market.
22. The reason why we are yet to reach saturation of graduates is because of the central importance of these high-level skills to the success of our economy. This is because in knowledge based economies, human capital is the primary indicator of future economic growth. In the UK, we know that of the 13.5m jobs to be filled to 2017, over half (56%) will require people to hold graduate level qualifications, indicating a significant shift towards greater demand for higher level skills.
23. A graduate contributes between 20 and 48 per cent greater productivity to the labour market than employees holding lesser qualifications. UKCES predict a continuation of this trend in ‘Working futures 2007-2017’ stating that the most significant increases in employment up until 2017 are likely to be in higher level occupations such as:
- managers & senior officials (+872,000, 1.7% pa)
 - professional occupations (+643,000, 1.5% pa)
 - associate professional & technical occupations (+654,000, 1.4% pa)
24. Conversely, declining employment levels are projected for:
- skilled trades occupations (-226,000, -0.7% pa);
 - machine & transport operatives (some -117,000, -0.5% pa)
25. As this Figure 1, this is the case across Europe with an increasing proportion of skilled occupations in the OECD.

⁶ The net present value (NPV) of a graduate is calculated by comparing the costs (fee, loss of earning during study – much higher than fees - , additional tax over a lifetime and additional social contributions) to the benefits (additional earnings over a lifetime and employment advantage (lower risk of unemployment)) of going to university. The NPV of going to university in the UK is one of the highest in the OECD and is increasing.

Figure 1: new jobs are in high skilled areas



Source: *Universities Scotland, What was / what next? February 2009*

26. While we fully understand why the UK government has moved away from using targets for the proportion of graduates, we believe that the inclusion of a 40% target with the Europe 2020 Strategy provides an important signal about the importance of investment in this area to support economic recovery and growth. In that vein, we would suggest that more work needs to be done to argue the value that a 'highly-skilled' workforce will bring.

5. What is your view of the proposed introduction of a European universities league table – the 'U-Multirank' tool?

27. University league tables have increased in prominence and influence in the UK over recent years and much work has been done in this area to consider their value but also some more negative consequences.

28. A report commissioned by HEFCE in 2008, *Counting what is measured or measuring what counts?*⁷, investigated league tables and their impact on higher education institutions (HEIs) in England and found that:

- League tables did not provide a complete picture of the sector
- Some of the measures included were poor proxies for the qualities identified: the measures used by the compilers were largely determined by the data available rather than by clear and coherent concepts of, for example, 'excellence' or 'a world class university'.

⁷ HEFCE, *Counting what is measured or measuring what counts?* April 2008
http://www.hefce.ac.uk/pubs/hefce/2008/08_14/

- The resulting rankings largely reflected reputational factors and not necessarily the quality or performance of institutions.
29. The report looked into the extent to which higher education institutions would welcome an official ranking from the sector bodies and found that only 5% of survey respondents indicated support for one. When the report was published, HEFCE confirmed that it did not intend to introduce an official published ranking, but instead would continue to support the Unistats web-site, which enables users to compare subjects and institutions in a way that recognises the diversity of user needs.
30. Providing adequate information for students has continued to be a focus since this report was published. Most recently this was outlined in the Higher Education White Paper, which proposed that higher education institutions should provide a standard set of information about their courses⁸, and that Government would make it easier for prospective students to find and compare this information.
31. We do not believe that a U-Multirank tool would be a helpful development. As the HEFCE study found league tables or ranking tools of this kind are often a blunt instrument which do not allow different strengths across diverse institutions to be recognised and utilised. As such we would be particularly concerned if such a tool was used as the basis for funding decisions in the future.

Funding instruments

6. What are your views on the effectiveness of the proposed EU financing arrangements, including funding increases for higher education under the 2014-2020 Multiannual Financial Framework (Education Europe, Horizon 2020 and Cohesion Policy)?

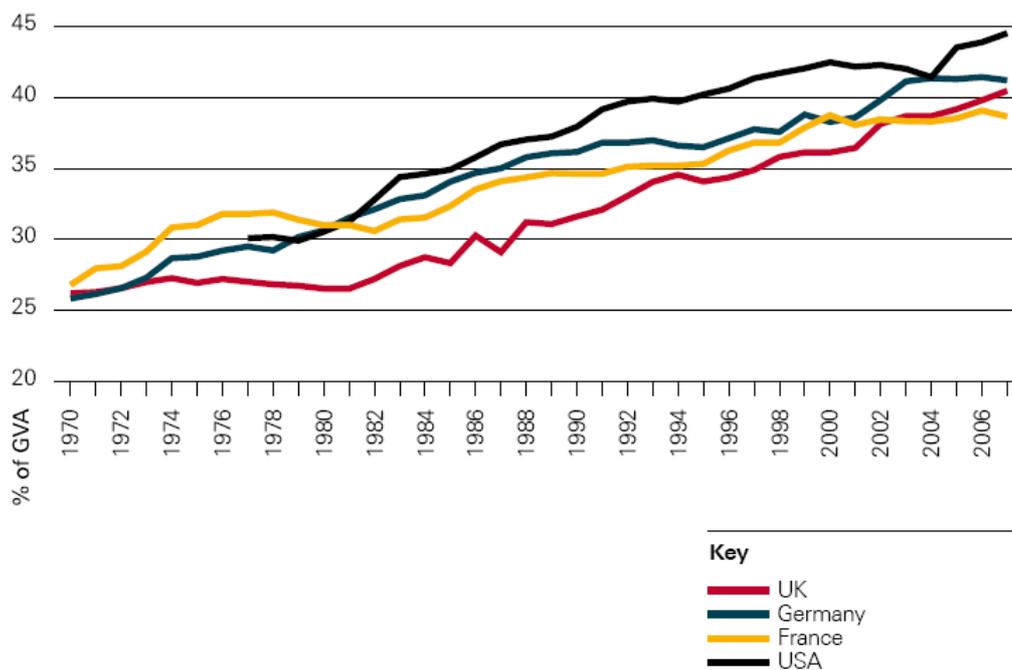
32. The focus of Europe 2020 on investment in R&D as an important pillar of plans for “smart growth” is to be welcomed as is the corresponding increase in the budget devoted to investment in education, research and innovation as part of the Multi-annual Financial Framework. Again this is backed up by strong evidence.
33. Innovation is widely recognised as a key driver of growth and productivity; it was responsible for two-thirds of productivity growth between 2000-2007 and was the common defining feature of the fastest growing 6% of businesses between 2002 -2008. These businesses generated half of all jobs created by existing businesses during this time.⁹
34. Figure 2 shows the consistent increase of knowledge-intensive services and high-tech manufacturing as a percentage of gross value added (GVA) in the UK, US, Germany and

⁸ Known as the Key information set, see <http://www.hefce.ac.uk/learning/infohe/kis.htm>

⁹ Shanmugalingam S et al, Nesta, Rebalancing Act, June 2010, http://www.nesta.org.uk/rebalancing_act

France. This demonstrates the extent to which these countries have become innovation-based economies.

Figure 2: Continued investment necessary to increase productivity in high value-added sectors, as part of ongoing transition to a knowledge economy



Source: The Royal Society, *The Scientific Century, securing our future prosperity*, March 2010, <http://royalsociety.org/The-scientific-century/>

35. In their report, *What was / what next?*, Universities Scotland highlights four main factors that influence productivity: innovation, skills, investment in capital and competition. They find that:

“The creation of new ideas, technologies and process can have a significant effect on productivity performance. Innovations often have ‘spill over’ effects that can create wider benefits to the overall economy than simply to the person or firm who created the innovation. These spill overs can be contagious and increase the productivity of all firms as new processes and ideas are copied.”¹⁰

¹⁰ Universities Scotland, *What was / what next?*, February 2009, <http://www.universities-scotland.ac.uk/uploads/publications/What%20next%20-%20black%20and%20white%20version%20for%20website.pdf>

The report was produced under guidance from a panel of 11 leading Scottish economist – no key argument or assertion was included unless it was supported by every members of the advisory panel and supported by multiple pieces of verifiable evidence.

36. In addition, we would highlight the following point made in the Europe 2020 strategy:

“R&D spending in Europe is below 2% compared to 2.6% in the US and 3.4% in Japan, mainly as a result of lower levels of private investment. It is not only the absolute amounts spent on R&D that count – Europe needs to focus on the impact and composition of research spending and to improve the conditions for private sector R&D in the EU. Our smaller share of high-tech firms explains half of our gap with the EU.”¹¹

37. The extent of existing business engagement with universities towards innovation and commercial impact is often underplayed and yet there is more that could be done to support it. Alliance universities have much expertise in this area as business-focused institutions that embed these partnerships across their activities. To name a few examples, this has included Siemens co-investing with the University of Lincoln to create a greenfield engineering school, Hewlett Packard signing a strategic agreement to support graduate employability engage in research projects and engage in curriculum design, or the University of Bradford investing more than £4 million to develop Research and Knowledge Transfer Centres focussing on working with business to find solutions in areas such as Micro and Nano Technologies, Advanced Materials Engineering and Pharmaceutical Engineering.

38. To that end we also support the proposals set out within the Innovation Union Initiative aiming to enhance cooperation between the worlds of science and business, remove barriers for entrepreneurs to bring ideas to market and to launch European Innovation Partnerships.¹²

¹¹ Europe 2020: A strategy for smart, sustainable and inclusive growth, COM (2010) 2020

¹² Europe 2020 Flagship Initiative Innovation Union, SEC (2010) 1161