The impact of exiting the European Union on higher education inquiry

CaSE Response | 11th November 2016

Summary

CaSE welcomes the opportunity to feed into this consultation on the impact of Brexit on students, staff and higher education more broadly. The health of the wider science base and the health of our universities is closely linked, and many of the issues and concerns in light of Brexit are shared. Companies, universities, charities and research institutes alike see the ability to retain, access, move and attract skilled people as an essential pillar of securing a positive outcome for science as the UK leaves the EU.

Leaving the EU will present enormous challenges, along with some opportunities, right across the spectrum of science and engineering. The sector's clear priorities in the negotiations relate to people, funding and regulation. And cutting across all three of those is the importance of collaboration. We were pleased that the Prime Minister confirmed her government's commitment "to ensuring a positive outcome for UK science as we exit the European Union."[1] To achieve this, negotiations and domestic policy must work together to create a migration system and environment that actively supports science, research and innovation. For the purposes of this representation, the focus is on the impact of Brexit on students, academics and higher education institutions.

Pursuing a policy of reducing the number of skilled migrants and students coming to the UK, is neither the UK public's wish nor is it in their interest. The government should:

- Urgently clarify the work and settlement rights of EU staff and students currently in the UK
- Extend the guarantee regarding fee levels and access to loans for the duration of their course to EU students considering coming to the UK to study in 2018-19
- Ensure there is no limit on the number of overseas students coming to the UK
- Actively promote the UK as a place to learn, earn and contribute

The Business Secretary has already stated that the government "must provide the research funding to keep us out in front[2]." The Government should:

- Commit to ensuring the total level of investment in UK science, from EU and UK government sources combined, does not decrease from the current level following Brexit.
- Set out an ambition and framework for combined public and private research and development investment to reach 3% of GDP in 10 years.

[1] http://www.bbc.co.uk/news/science-environment-36915846

[2] https://www.gov.uk/government/speeches/the-importance-of-industrial-strategy

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About CaSE

The Campaign for Science and Engineering (CaSE) is the leading independent advocate for science and engineering in the UK. CaSE works to ensure that the UK has the policies, funding and skills to help science and engineering thrive. It is funded by around 800 individual members and 100 organisations including businesses, universities, learned and professional organisations, and research charities. Collectively our members employ 350,000 people in the UK, and our industry and charity members invest around £19.3bn a year in R&D globally[3].

Introduction

Science and innovation are an area of UK competitive strength, with the potential for contribution to the creation of quality jobs, economic growth and bringing wider societal benefits across the UK[4]. The Chancellor himself has described the link between the strength of our research and future innovation, growth and productivity[5].

EU staff and students are a positive contribution to the UK

Universities contributed over £73bn to the UK economy, including Higher Education is one of the UK's most successful export markets. The sector generated an estimated £10.7 billion of export earnings for the UK in 2011–12[6]. EU students alone generate £3.7bn a year for the UK economy (£1.44 bn on campus and £2.27 off campus) and support over 34,000 jobs across every part of the UK[7].

Higher Education is highly international

UK higher education is built on a highly diverse and international student and academic body. EU students make up 5.5% of students in the UK (11.6% of postgraduates and 4.5% of undergraduates)[8]. EU students are not evenly distributed across all courses or disciplines, for instance 18% of postgraduate research students in mathematical sciences and 16% in computer science students are from the EU[9].

There is a large body of evidence showing that international connectivity aids the impact and productivity of research[10]. A study by King's College London found that high- performing institutions in the 2014 Research Excellence Framework assessment had more staff with non-UK nationality and more staff whose previous appointment was overseas than the average[11]. It is therefore not surprising that in a CaSE member survey, the most common

[3]Figure calculated in November 2015 from latest available data

[4] CaSE Briefing, Why Champion Science and Engineering?, 2015

[5] http://www.sciencecampaign.org.uk/news-media/case-comment/science-and-tech-soundbites.html

[6] http://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2014/the-impact-of-universities-on-the-uk-economy.pdf

[7] http://www.universitiesuk.ac.uk/news/Pages/eu-students-vital-to-regional-economies.aspx

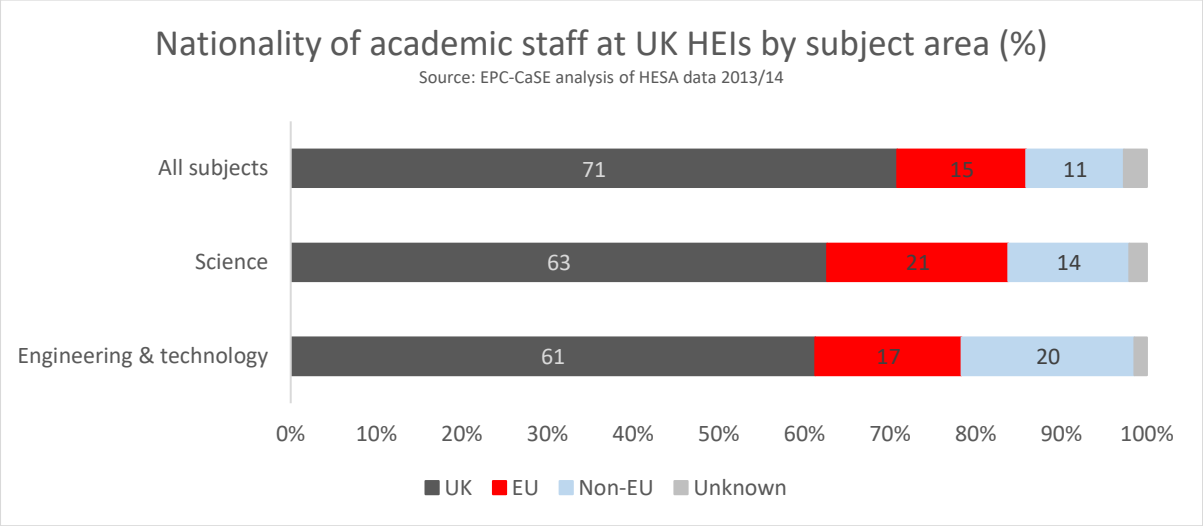
[8] https://www.hesa.ac.uk/data-and-analysis/publications/students-2014-15

[9] http://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2014/international-students-in-higher-education.pdf

[10] Elsevier, International comparative performance of the UK research base, 2013 ; DEMOS, Knowledge nomads: why science needs migration, 2009 ; Department for Business, Innovation, and Skills, UK share of highly cited academic papers, 2014 ; Kings College London, Characteristics of high-performing research units, 2015

[11] Kings College London, Characteristics of high-performing research units, 2015

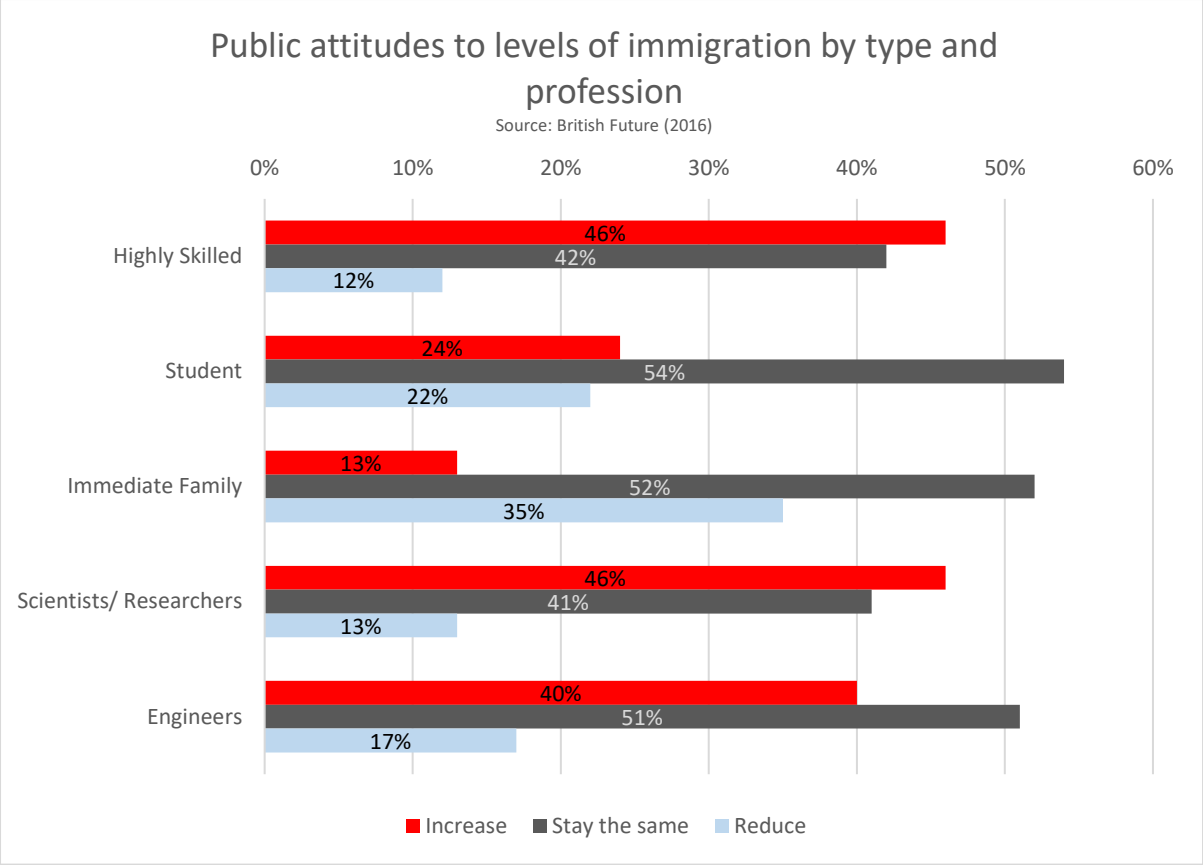
benefit of immigration listed by respondents was that it supports international collaboration[12]. Across all subjects 15% of academic staff at UK higher education providers are from EU countries, while 11% are from non-EU countries. Again the figures show that the academic workforce is particularly international in science and engineering. Science has a greater proportion of non-UK EU staff (21% compared with 13% across other subjects) and although 17% of engineering academics are from the EU, greater numbers of academics in engineering disciplines are non-EU nationals (see graph)[13].



The public support migration of researchers and students

The public is overwhelmingly in favour of immigration of highly skilled workers and students. A 2014 public attitudes survey found that 35% of the public favoured greater numbers of researchers coming to the UK compared to 20% against[14]. Interestingly, in polling conducted after the EU referendum in June, the balance tipped further in favour of skilled immigration; 46% of the public supported increased migration of highly skilled workers, a further 42% saying it should stay the same and only 12% wanting a reduction[15]. These proportions are highly similar between those who voted leave and those who voted remain in the referendum. Similarly 78% of the public want to see international student numbers increase or stay the same[16] and only a fifth of the public think of students as immigrants[17].

[12] CaSE immigration report
[13] EPC-CaSE analysis of data drawn from the Higher Education Database for Institutions (HEIDI)
[14] Migration Observatory/YouGov (2014) *Immigration and independence: public opinion on immigration in Scotland in the context of the referendum debate*
[15] British Future (2016) http://www.britishfuture.org/wp-content/uploads/2016/09/What-next-after-Brexit.pdf
[16] Ibid
[17] Ibid



What is the likely impact of the UK exiting the EU on EU students studying in England?

UCAS has already reported a 9% fall in EU student applications this year[18]. Whether this is an isolated fall or whether this is the beginning of a trend may depend on how the UK responds. It is likely this drop in student applications is linked to the EU referendum as there was no such fall in applicants from outside the EU. The vote to leave the EU casts a shadow of uncertainty. The guarantee from government that EU students studying in the UK or planning to begin their studies in the UK from 2017/18 will be guaranteed the same rights and access to funding as they possess now was an essential measure to address some of that uncertainty[19]. Uncertainty remains for these students, however, regarding the right to stay and work in the UK on completion of their studies.

Further, and perhaps more difficult to tackle is the negative rhetoric in the UK towards immigrants. As a result, an impact of exiting EU could be a diminished view of the UK as a desirable place to choose to study. This could reasonably be seen as an impact on universities and the wider UK rather than on EU students, as they will simply undertake their studies elsewhere. As public attitude surveys show, the wider public concerns around immigration are not extended to student migration, or indeed to skilled workers. This must be recognized by the government by ensuring there is no limit on the number of students

[18] https://www.ucas.com/corporate/news-and-key-documents/news/applicant-numbers-%E2%80%98early-deadline%E2%80%99-university-courses-increase
[19] https://www.gov.uk/government/news/funding-support-for-eu-students

coming to the UK. Further the Government must actively promote the UK as a place to learn, earn and contribute, and work to combat the current hostile climate towards migrants in the UK.

What protections should be in place for existing EU students and staff? How may changes to freedom of movement rules affect students and academics in English higher education institutions?

There is an urgent need for the Government to clarify the work and settlement rights of EU staff and students currently in the UK. CaSE believes that EU students and staff at UK institutions should be able to remain in the UK following the UK's exit from the EU. Although the UK is a strong research nation, researchers and students are highly internationally mobile. According to a study by Elsevier, almost 72% of UK-based researchers[20] spent time at non-UK institutions between 1996 and 2012. This is a much higher proportion than for many of our international peers. This mobility is not because scientists and engineers are particularly fickle about where they live. It is because it is integral to their work; internationalism brings huge benefits to their own research and the productivity of science and engineering as a whole. Recognising this, the think-tank Demos coined the term "knowledge nomads" in 2009 to describe this.

The longer the uncertainty around work and settlement rights persists, the more likely it is that the UK will experience an increase in EU nationals leaving, and a reduction in new EU nationals choosing to relocate to the UK. This clarity is therefore not only vital for colleagues who are EU nationals and must make decisions about where to work and live, for themselves and their families but it is a protection for the UK and our universities.

The Government should also extend the guarantee regarding fee levels and access to loans for the duration of their course to EU students considering coming to the UK to study in 2018-19. This could help to mitigate the risk of further drops to EU student numbers in the interim period prior to the completion of negotiations with the EU.

The future of the Erasmus+ programme following the withdrawal of the UK from the EU

A number of our members have expressed concern at the potential loss of the UK's participation in the Erasmus+ programme. We would echo the ask of Universities UK for the Government to affirm that it is a priority to ensure that future EU academic and student mobility is not impeded by unnecessary bureaucracy regardless of the immigration status of EU nationals, communicating a welcoming and positive message worldwide[21].

[20] Elsevier, International comparative performance of the UK research base, 2013

[21] http://www.universitiesuk.ac.uk/policy-and-analysis/brexit/Pages/short-term-priorities.aspx

How to ensure UK universities remain competitive after the withdrawal of the UK from the EU

The emerging top level priorities for Government to ensure competitive UK universities and the wider health of the UK research base are:

- Talent – retention, access and mobility of students and researchers
- Funding – access to EU funding and facilities, and ambitious domestic funding
- Regulation – continuity and harmonisation of regulations and standards

Talent

The ability to retain, access, move and attract skilled people is an essential pillar of securing a positive outcome for science as the UK leaves the EU. This came across strongly in our member discussion meeting following the EU referendum.

There is fierce global competition for talented people and an active transfer market of scientists, engineers and technicians across the world. Therefore as the UK goes through a period of substantial uncertainty and change there is no room for the UK to be complacent in assuming that global talent, including UK nationals, will continue to see the UK as an attractive place to work or study. Instead negotiations and domestic policy must work together to create a migration system and environment that actively supports a healthy science and engineering sector.

Scientists in both academia and industry are motivated by the desire to work with great researchers and in institutions where the science is of the highest quality[22]. A 2013 study of more than 16,000 international scientists supports this conclusion, with career prospects, the quality of the faculty and colleagues, and the scientific excellence of the institution being the top three motivating factors for emigrating to another country for research[23]. International collaboration and researcher mobility were acknowledged as being core to the maintenance and further development of the UK's world-leading position as a research nation[24].

Part of ensuring that the UK is a destination of choice for scientists of all nationalities (including British nationals) to build a career is to ensure this is a place where they can participate in the best science. Access and retention of talent therefore cannot be divorced from access to funding, regulation and ability to collaborate with the rest of the world, including Europe.

Funding

Overall, the UK is a net contributor to the EU, but it is a net receiver of EU funding for research; receiving €8.8bn between 2007 and 2013 compared to an indicative contribution of €5.4bn. Moreover, the importance of EU funding to research is growing, with half of the

[22] DEMOS, Knowledge nomads: why science needs migration, 2009

[23] Chiara Franzoni, Giuseppe Scellato, and Paula Stephan, Foreign-born scientists: mobility patterns for 16 countries, 2012

[24] Elsevier, International comparative performance of the UK research base, 2013

increase in UK university research budgets over this period coming from EU government sources. In an environment of financial strain it is clear that the EU has provided a valuable source of funding for the sector[25].

In real terms, the funding from EU government sources more than doubled between 2007/08 and 2013/14, while over the same time period UK Research Council funding increased by 7%, and recurrent research funding (allocated through the Higher Education Funding Councils) declined by 2.2%. EU government sources of funding are therefore increasingly important to UK research, making up over 10% of research income in HEIs in 2013/14. EU funding represents 19% of total engineering research grant and contract funding and 17% of funding for science disciplines. Disciplines within science and engineering together attract over half (53%) of all research grants and contracts income from EU sources[26].

The extent to which researchers based in the UK will be able to interact with and access EU funding programs and facilities following Brexit will be a matter for the negotiations. It should be noted that the position the UK takes on movement of people is likely to have knock-on effects to our ability to access EU research programmes.

The most overwhelming result in a CaSE survey of scientists and engineers ahead of the EU referendum[27] was that 96% agreed that EU funding supported new academic collaborations (66% strongly agreed). 67% also agreed that EU funding supports new industry collaborations. There was a strong view amongst our members that the UK should look to negotiate continued access to EU programmes and collaborative opportunities, and seek to maintain influence over the direction of EU research and innovation priorities.

Although it is possible to participate in EU programmes as a non-member state, the amount of funding received by all non-member states combined does not equal the current level of funding received by the UK. Only 7.2% of the research funding awarded by the European Union and the European Research Council has been allocated to non-member states in the last decade – a total of €3.5bn – mostly to Norway and Switzerland[28]. Therefore, for the UK to receive even a fraction of its current level of EU funding following Brexit would be a substantial shift in the balance of research funding going to members and non-members. It is also politically improbable that continuing EU member states would agree to a non-member state being a net receiver of funding for research as we are now[29]. The scale of the investment shortfall will become clearer as EU negotiations develop, but at present UK receives over £1billion a year in competitively won R&D funding from the EU. Increased domestic public investment is therefore needed in order to stand still.

Without intervention by the UK Government the overall level of investment in UK science and innovation will decrease. The Government should commit to ensuring that the total

[25] http://www.sciencecampaign.org.uk/resource/CaSEEPCEUReport2015.html
[26] Ibid
[27] Survey undertaken October, 2015 by CaSE and the EPC. 403 respondents from UK HEIs and industry as part of 2015 report, The role of EU membership in UK science and engineering research
[28] Digital Science, Examining the implications of Brexit for the UK research base, 2015
[29] The Role of EU membership on UK science and engineering research, CaSE, 2015

level of investment in UK science, from EU and UK government sources combined, will not decrease from the current level following Brexit. Further, as part of the industrial strategy, the government should set out an ambition and framework for combined public and private research and development investment to reach 3% of GDP in 10 years.

Regulation

Leaving the EU presents complex challenges for the future of regulations, standards and legislation that affects and governs our sector from data protection to environmental codes and clinical trials. This is also an area where leaving the EU could provide real opportunities to create a distinctive, attractive environment for research and innovation in the UK. However, this is balanced by the need to first and foremost ensure continued alignment and compatibility with EU regulatory frameworks to support cross-border collaboration, participation in programmes and trade.

In our members forum overall, the appetite across the sector for taking the opportunity of leaving the EU to change regulation and legislation affecting the sector was mixed. Some expressed the view that they wanted to see all regulation continue as before to reduce disruption to working practices and trade. The majority wanted to see continued alignment and compatibility with EU regulatory frameworks but could also see leaving the EU as an opportunity to try new approaches in some specific areas. What is clear is that the process will require very careful management, communication and detailed working with experts within the sectors and industries involved to ensure that regulation is fit for purpose and to avoid unnecessary disruption and damage to the UK's competitiveness during the transition period.