

Good evening. It perhaps makes sense to offer a little background for debates such as this. My home is in Ireland, and I came to St Andrews in part because of Scotland's reputation for valuing education and research. One of my concerns is to ensure that leading academics and students have good reasons for wanting to be in Scotland for their research and studies.

At present the debate over independence is a cause for uncertainty, it is difficult to evaluate how funding structures and opportunities will operate whatever the outcome of the referendum. This makes people wary of committing themselves to academic jobs in Scotland, and there is some evidence that it is inhibiting investment. There is a tension between the ambitions for a pluralist higher education system, and an emphasis on excellence that attracts the best scholars and students.

I would like to touch on three areas: the future of universities, our relationship with the UK Research Councils, and some of the associated issues about being a small country and its likely international influence in research.

These continue to be challenging times for universities in the UK. There are concerns that without additional funding even the Russell Group universities will slip down world rankings. Capital funding is a big issue; UK higher education experienced a £600m reduction in capital funding in 2010-11, but this was in turn clawed back from other sources. Perhaps that would be more difficult in a smaller country.

Many of our competitor universities in England have sought to develop their positions by dramatically increasing their student numbers in recent years. One consequence of the provision of free education in Scotland is that the numbers of Scottish student places are capped and so a similar increase in student numbers in Scottish Universities would be more difficult. Secondly, the additional students would presumably be from the rest of the UK and elsewhere, and so it would reduce the percentage of Scottish students in Scottish universities.

There has been much discussion of our possible relationship with the UK Research Councils after independence. The quality of research in Scotland is high, and Scotland currently receives ~13% of the funds awarded through the research grant system. Thus academics in Scotland presently benefit from that proportionally high success rate and from the ease of access to Government in Scotland. There is anecdotal evidence that research grant systems in small countries elsewhere have limitations, inhibited by the size of the research community and by discussions of how much of what is inevitably a small research budget should be targeted at more applied areas, and how much should be preserved for blue skies research. As many of us are currently working on the Research Excellence Framework, it is also unclear how such a key benchmarking exercise would be managed within the relatively small HEI community of an independent Scotland.

Much of the discussion around funding research after independence has therefore focused on some buy-in system, through which researchers in Scotland could submit research grants to the UK Research Councils much as they do at present. There has

been some suggestion that this could operate in ways similar to the EU, in a system in which all partners have similar standing, even though it may be that those who contribute most resource have more influence. However such a system between partners of similar status would seem to be different from one country buying into the research funding system of another country. It is surely likely that the host country will determine the research agendas, and most unlikely that the host and the guest countries will retain similar degrees of influence over the research spend.

In some ways the discussion over research councils is relatively straightforward. We are familiar with how they work, and with research grant funding in Europe. Much more challenging is industry focused research funding, as for example through the Technology Strategy Board, since here any buy-in would imply some agreement between governments over the industrial research priorities in the UK as a whole.

Underlying all these discussions of how research might be funded is the presumption that both England and Scotland will want to make this work. There is huge incentive north of the border to develop a new system, but as Andrew Marr has pointed out in his book *The Battle for Scotland*, many initiatives on Home Rule crumbled in the face of Westminster resistance if not indifference. The discussion of links to UK funding agencies is built on the supposition that Westminster will be pleased to support independence, and that is not borne out by the history of these discussions.

The third point is the question of scale, of whether internationally competitive researchers, and students, tend to prefer relatively large academic communities that have more influence internationally. Colleagues with close links to Scotland may well be tempted by positions in an independent Scotland, but those without such ties may prefer to seek employment in countries with a larger higher education system.

One way this can be evaluated is through the performance of universities in countries with different populations in world league tables. Scotland at present does very well with three universities in the top 100 of the QS 2013 league tables, however there is an argument that this reflects its position within the larger unit of the UK. The US tops the league tables with 30 universities and a population of ~317m, with the UK second with 18 universities in the top 100 and a population of 64 million. Sweden has 2 universities in the top 100 and a population of 9.6 million, and countries with populations similar to Scotland (Ireland, Denmark and Norway) each have one university in the top 100. The implication is that with time an independent Scotland would have one, rather than three universities in the top 100.

In conclusion, perhaps it is helpful to couch the argument in terms of evaluating the worst reasonable case, and the best reasonable case, that might follow from independence. Even the best reasonable case would be no better than today, and the concern is that the worst reasonable case is likely significantly to disadvantage researchers in Scotland.