



HOUSE OF LORDS

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The Select Committee on Science and Technology

Inquiry on

THE FUTURE OF INNOVATE UK

Evidence Session No. 2

Heard in Public

Questions 9 - 16

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Witnesses: Dr David Hardman MBE, Laura Smith and Professor Luke Georghiou

USE OF THE TRANSCRIPT

This is a corrected transcript of evidence taken in public and webcast on
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Members present

Earl of Selborne (Chairman)
 Lord Borwick
 Lord Broers (co-opted)
 Lord Cameron of Dillington
 Lord Fox
 Lord Hennessy of Nympsfield
 Lord Hunt of Chesterton
 Lord Mair
 Lord Maxton
 Baroness Neville-Jones
 Lord Oxburgh
 Viscount Ridley
 Lord Vallance of Tummel
 Baroness Young of Old Scone

Examination of Witnesses

Dr David Hardman MBE, Chairman, United Kingdom Science Park Association, and **Laura Smith**, Head of Construction & Manufacturing, Confederation of British Industry (CBI) and **Professor Luke Georghiou**, Vice-President Research and Innovation, University of Manchester

Q9 The Chairman: Welcome to the second session. We are most grateful to you for joining us today for this short inquiry on innovation in the United Kingdom. Would you like first to introduce yourselves for the record? If you would also like to make an opening statement, please feel free to do so.

Dr David Hardman: I am David Hardman. I am chairman of the UK Science Park Association. I am also chief executive of Innovation Birmingham, which is one of the science parks in Birmingham. My interest is very much coloured by the early-stage technology businesses that you find on science parks across the UK and the role that science parks have to play in driving the translation of technology and ideas, from universities and elsewhere, into product and services in the marketplace, which I think is somewhat overlooked in this whole debate.

Laura Smith: I am Laura Smith. I am head of construction and manufacturing at the CBI, and a weird quirk of my portfolio is innovation policy as well as construction and manufacturing. It goes without saying that innovation is critical to our members both at a macroeconomic level in terms of what innovation can do to drive productivity and prosperity for the economy and, of course, at a micro level, a company level, in terms of gaining competitive advantage, increasing productivity, and increasing jobs and growth in the UK.

The Chairman: Thank you. Welcome back, Professor Luke Georghiou. You have helped us many times in the past. Would you like to introduce yourself once more?

Professor Luke Georghiou: Thank you very much. I am Luke Georghiou. I am vice-president for research and innovation at the University of Manchester, and, as an academic, a long-term analyst of research and innovation policy in the UK. While I will try to give the perspective of research intensive universities, I would like principally to give my personal views in this session.

Q10 The Chairman: Thank you. I will start again with a very general question. It would help us if you each told us the extent to which your organisation currently works with Innovate UK, what form these interactions take and whether they work. In your view, does Innovate UK have an important role in supporting innovation in the UK?

Dr David Hardman: The answer is, yes, it does have an important role, but it cannot by any means be seen as the only one. There is an issue of centralisation versus a local agenda. Everyone will recognise that innovation is cited as a contact sport and hence needs to be driven very much locally, where close connections readily take place. We have been in discussions over the past few years, during my tenure as chair of UKSPA, to point out the role that science parks could play in creating that local contact point. We have had good discussions, but I have to say that they have not really translated into activity. Of course, a few of the catapults are based on science parks, which creates one link. The local representatives who are now being put forward might provide a way in which we can engage, but I have to say that to date it has been a good idea but nothing has actually changed or happened.

Laura Smith: The CBI as an organisation has been supportive of Innovate UK since the days when it was the Technology Strategy Board. We have consistently believed from feedback from members that Innovate UK is underresourced for fulfilling its business-focused mission. Members have mostly positive experiences of working with Innovate UK, which is especially true once they are in the system; once they have done it for the first time, the second, third and multiple interactions after that become much easier once that understanding is there. We can talk about this when we come to the other questions, but there are some particular challenges for smaller businesses in navigating and understanding some of those routes to entry.

We think that Innovate UK has been very important and that it is not entirely coincidental that, during the very serious recession of the past few years, private spend on R&D has continued to increase by 5% or 6% every year. Innovate UK's role within the broader ecosystem—as David said, it is not the only interactor with business innovation—is important.

Innovate UK's own data has some interesting details on return on investment. Every £1 invested creates £7.30 of GVA, which does pretty well. We should remember that the grant funding arrangements that currently exist are through a co-funding arrangement with the private sector, so this is business putting its money where its mouth is, as well as Innovate UK.

Professor Luke Georghiou: The University of Manchester interacts with Innovate UK at both strategic and project levels. At project level, our most frequent activity is probably through Knowledge Transfer Partnerships. We currently hold 26 of these. This is a scheme that is very successful in reaching SMEs in particular. In larger and strategic initiatives, we have taken part in the processes that have led to the establishment of the Medicines Discovery Catapult

and part of the Precision Medicine Catapult in our region. We are embarking on a new kind of project, the £10 million CityVerve Internet of Things demonstrator, which is located in Manchester and led by business and the city.

On the question of the importance of Innovate UK, the collective evidence from many evaluations of specific schemes and from an overarching economic study performed in 2014, in which I had some involvement, is that firms that get government grants, mainly from Innovate UK, invest more in R&D, are more likely to collaborate and to employ graduates, particularly STEM graduates, and are more innovative companies. When those projects also include co-operation with universities or public sector research establishments, the impacts appear to be greater.

So the basic picture is good. None the less, there is room for improvement. The scale of activity has been limited by resources. The sectoral reach in the past has probably been too narrow. The recent rebalance towards life sciences and digital is welcome, given the direction of our economy. I would also have to say that, in the past, co-ordination with universities could have been better.

Lord Broers: I have a general question on that. Given its budget, is its spread appropriate, or is it spreading it too thin? Would it do better to concentrate on fewer, reduce the breadth a bit and increase the money, or is it about appropriate at the moment?

Professor Luke Georghiou: The new strategy focuses activities more, but by comparison with innovation agencies in other countries it is focused quite strongly on the grant product, so in that sense it is not as spread as it could be. There is no doubt that it is addressing clear deficits in SMEs in this country. We lack a sufficient number of SMEs engaged in R&D and innovation. They have deficits in both finance and capability, and my view is that this activity is underresourced.

Q11 Baroness Young of Old Scone: That leads very neatly on to my question, which is about the challenges and the barriers to working with Innovate UK, whether you think there are things that get in the way particularly of SMEs engaging, and whether the current changes, particularly in the delivery plan, will help with that.

Dr David Hardman: Continual change is never helpful. In the public sector, business support has undergone change in pretty well every activity almost continually, certainly since the RDAs disappeared. That change is not just in projects but in names. If you want people to follow it and keep following it when they are trying to run a business with five people or fewer, some form of consistency of offer is important. Again, short-term initiatives do not help, because they just about get going, just about get heard and are just about learnt by these people, and all of a sudden they have gone or their name has been changed. I am not suggesting that projects should stay in place for the sake of it, but one of the finest examples for me was the SMART awards, which were very successful and very successfully used by early-stage start-up businesses, often in diversifying their product lines. The name was changed and it became central, and both those things made it much less interesting and much more difficult for the SMEs to get hold of. The name then came back, but it was still centralised. I know that I keep going on about this, but in the past under the DTI the SMART awards were handled at a local level. Local businesses helped to promote the idea of SMART awards and drove a very successful set of projects. By pulling it all into one place and

continually changing it, you do not make it as easy for the start-up and SME sector—and let us work on the principle that 90% plus of businesses employ fewer than 10 people.

The Chairman: Do either of the others want to contribute on this?

Laura Smith: No.

Professor Luke Georghiou: There is a real sense of change in the organisation, as represented by the delivery plan. We are seeing significant rationalisation into sector groups and the focus of the schemes on to just three areas. This messaging will be very welcome for the firms we work with. However, we would also like to see equal effort put into achieving a high turnaround speed for applications. It is in the nature of innovation that you must be as fast as possible, and de-bureaucratisation is very important.

Lord Hunt of Chesterton: You have talked about these small SMEs—I am involved in one myself—but you have not talked at all about the notion of picking winners: a grand strategy. One example is construction. This country now has big construction projects. Does that connect into new kinds of new technology perhaps—Lord Mair’s area? You have described it slightly as a responsive mode as opposed to a big strategic mode: “Here are some big areas, and we’re going to push for them. The Germans and the French are going to technology 4.0”. The answer is the same, and you quickly get an idea of some big areas that they are going for. It is very difficult to get that sort of feel from any discussions that we have where people comment on Innovate UK.

Laura Smith: For us and our members, it is exactly as you have described; a modern industrial strategy is what members really value and really got behind in the last Parliament. You can see how, by having a modern industrial strategy, you could look at this on a sectoral basis. In the manufacturing space, the fourth industrial revolution is all that my manufacturing members are really talking about, whereas in construction we are talking much more about off-site manufacturing, the use of BIM, the use of software through design and delivery. Quite different conversations are happening on a sectoral level. For us, an industrial strategy is one lens that you can use to help to drive it through the system.

Professor Luke Georghiou: Helping to build new innovation ecosystems in growing sectors is an important role for an innovation agency to have. To do that there clearly has to be more than responsive funding; you have to create banners around particular technologies, make sure that the infrastructure is there and, very importantly, also engage large firms such as the representatives we heard in the previous session. Small firms exist largely to sell into large firms, so if their innovation strategies are not built from the very beginning through working with those firms in procurement and other relationships they are not likely to succeed. There is therefore a bigger, co-ordinating and orchestrating role for the agency.

Dr David Hardman: To come back to the procurement issue, there is huge opportunity there; you only have to look at all the discussions going on in Birmingham about HS2. The opportunity is definite. The issue is the start-ups’ ability to go in and tender their services against a particular tender. This goes back to the discussion in the previous session about the risks for early-stage businesses. There is no doubt that there are risks associated with working with a very small company when you are trying to do a big project like HS2, so the procurement processes tend to select against the start-up and the small company, where a lot of that innovation is to be had.

Q12 Baroness Neville-Jones: I declare an interest as a member of the Engineering and Physical Sciences Research Council. Could you comment on the Government's plans, which were announced by BIS recently? They contain a number of important features, one of which is the idea that Innovate UK should become a council under UKRI. What do you feel about the risks and opportunities that are likely to arise from that situation? Do you see the whole tendency also to put a body above as helpful in guiding priorities, or as a potential limitation on Innovate UK's independence?

Professor Luke Georghiou: Our view at the time of the consultation was negative on this change. This was based on the view that the needs of business are different: the allocation of resources does not follow the same model of project application and peer review as it does in the academic community. The most successful innovation agencies, such as Tekes in Finland, for example, are much more proactive and hands-on than is normal for a research council. Academic research communities are quite homogenous. They are very savvy: if somebody says they are going to fund an area of research, we will beat a path to their door. That is not the same for the target community of an innovation agency; it is a quite different relationship.

Another key risk is that of mission drift and convergence—in both directions. We heard earlier about the invalidity of the linear model narrative. None the less, this makes it easier to fall back on. It is a higher risk that we have to deal with. While there is great value to be extracted through good co-ordination and the Venn diagram space, if you like, between research councils and Innovate UK, there is also a risk that we concentrate only on that space, not on the distinctive missions that each of them has.

Baroness Neville-Jones: Since the plan was published—as you said, your attitude to what you had heard beforehand was negative—have you been reassured by the actual document?

Professor Luke Georghiou: We are where we are. The key aim now—I hope, with the advice of this Committee as well—is that the structures are designed to preserve that distinctiveness. We have heard that the name and legal standing of Innovate UK is protected to a higher degree than that of the research councils, but we have heard nothing else about it. It will need, for example, to have different employment conditions for its staff to get people with the business experience that it will need to do its job properly. It cannot work exactly on the same basis. There is always talk of back-office savings, but I suspect that they are largely mythical and did not materialise in the past.

Laura Smith: I would just echo most of Luke's comments. When the consultation launched in both the HE White Paper and the BIS consultation on the possible integration, members felt that although they could see that some benefits could be driven from integration, overall the risks of doing so would outweigh any of them.

You will be familiar with the benefits, but just to recap they are better linkages between the research and business innovation community and a more coherent pathway for the commercialisation of that research. One of the main risks that members talked to us about was losing some of the progress made over recent years. They feel that we have made a heck of a lot of progress, whether through Innovate UK or the catapult centres, in developing the right ecosystem in the UK. The move from grant funding to the new financial products also means that Innovate UK and the research councils will become even less similar to each other, because they will be using fundamentally different financial products to fund research and innovation. There is real concern about the huge disparity between the

size of the budget between the existing research councils and Innovate UK, summed up by concern that Innovate UK's influence would be dwarfed and its impact distorted. That was how members summed up the risks to us.

The Chairman: Dr Hardman, did you want to add anything?

Dr David Hardman: Just briefly. The danger is that it reinforces the idea of linearity between science and research and innovation coming through from the universities. I am not undermining what universities do—it is very important—but a lot of innovation closer to market comes the other way, from within industry.

Lord Mair: To follow up on Baroness Neville-Jones's question and taking the answers that all three of you have given, are you really worried about this integration of Innovate UK into UKRI? Do you think it will change the relationship with businesses? Can it be as business focused as it should be?

Laura Smith: The draft Bill reassured us and members slightly that some of the safeguards seemed to be in place—whether the hypothecated budget for Innovate UK or the commitment for business representation on the main board—but I guess there is a heck of a long way to go while the Bill goes through the parliamentary process. We really need to make sure that those safeguards are not eroded as it goes through both Houses.

Professor Luke Georghiou: To add a different perspective, there also a worry the other way round: that research councils can be pulled excessively into the Innovate UK agenda. A great deal of extremely important basic research finds its way into the economy and society through channels other than Innovate UK.

Viscount Ridley: I just wanted to drill a little further into the linearity criticism. Is the danger that innovation comes to be seen as a daughter, a subset, of research by positioning it within the research councils? Is it that bad: that science always comes first and application second? As you have said, that is not always the case.

Dr David Hardman: You also have the science and innovation audits going on—again, very much driven from the university point of innovation. It reinforces a point. There are businesses that work very successfully with Innovate UK, and they will continue to do so. The question is whether this will provide a route to broaden that engagement. I saw some figures produced by the South-East Midlands Local Enterprise Partnership suggesting that only about 12% of businesses engage in R&D activities with universities in this country. I cannot claim to have checked the veracity of that number, but it is a small percentage and I think there is work to be done on engagement. Of those that do, the majority are businesses employing more than 100 people, so where is the innovation coming from? If it is, as we keep saying, from start-up, early-stage, growing businesses, anything that makes it more difficult for them to engage with this process will not be helpful.

Lord Broers: You all have broad experience, I guess across countries as well. Can you think of any country that considered joining their science funding with their innovation funding? I have been in the States a lot and I cannot recall there being discussion on whether to join NSF with ARPA. Can you think of any examples?

Professor Luke Georghiou: It tends to be done in the smallest countries where they simply cannot afford the overhead of two organisations, but we are not Iceland.

Lord Broers: Iceland has done it, has it?

Baroness Neville-Jones: With reference to funding, Dr Hardman said, and I can confirm, that there is anxiety in the academic community about bottom-up research being disadvantaged in the extremely centralised, top-down structure that is emerging. All things considered, would you have preferred Innovate UK to have been left alone as it was?

Dr David Hardman: Left independent, left standing on its own? Yes. I think that would have been better, although I am not saying that everything was perfect in its previous incarnation.

Baroness Neville-Jones: No, but with all its imperfections there was a balance of advantage. Does anyone else have a view?

Professor Luke Georghiou: I suspect that may not have been an option and that this change may have been a device to protect Innovate UK in an environment of very heavy cuts in the parent ministry, so perhaps wider things were in the balance, but I do not know the detail.

Baroness Neville-Jones: That may be a reason, but I am asking you a slightly different question.

Professor Luke Georghiou: In which case, I think a separate innovation agency, possibly with a wider focus on innovation than Innovate UK has had, would be beneficial for the country.

The Chairman: Something less radical.

Q13 Viscount Ridley: Chairman, I failed to declare another interest at the start, which I think I should. I am an early-stage investor in QuantuMDx, a Newcastle-based DNA start-up.

I want to put the same question to you that I put to the people who were here before—I think you saw that question—which is about the regions. We have already heard from Dr Hardman how the centralisation of the SMART awards was a mistake, but we heard in the previous session that the catapults are well distributed across the regions and the provinces. Is there a risk that we will lose that with the absorption of Innovate UK into UKRI?

Laura Smith: One of the things that I do not think came out in the last session—forgive me if I missed it—was that Innovate UK has very recently, within the last couple of months, put regional colleagues in place. I guess that the proof will be in the pudding and we will have to wait to see how that plays out, but Innovate UK is certainly putting resource into the regions to help to tackle the perception that it is merely in the golden triangle.

Viscount Ridley: Over and above the catapult point?

Laura Smith: Yes. We can go back and have a look, but I gave a presentation a couple of weeks ago, and each of the main regions—say, the north-east, north-west and south-west—would have a designated person in that region.

Professor Luke Georghiou: There was a time when, with the exception of branches of the High Value Manufacturing Catapult, there were none outside the south of England, but that situation has changed in recent years. The north-east has done quite well if you look at the distribution of Innovate UK's budget, at about 15%. The north-west has done badly.

I reinforce what my colleague said: the regional approach is new but very welcome. We now have Innovate UK personnel situated in greater Manchester but serving the wider region. A pilot is embedded in our original business growth hub. This will have the additional benefit

of allowing co-ordination with other kinds of business support that are delivered regionally and locally. In the past, there has been a disconnect between these and innovation support.

Dr David Hardman: I have nothing to add to that.

Q14 Lord Cameron of Dillington: I was going to ask the same question that I asked in the last session, which was about the proposed new methods of financing from Innovate UK. I think you were all present at the last session and heard the discussion about risk and the issues of SMEs and whether grants and loans are better or whether venture capital is better still. I wonder what thoughts you might have on the matter.

Dr David Hardman: Loans and risk do not go well together, whichever way you look at it. It would very much depend on the terms under which those loans were being awarded. As was said in the last session, the last thing we want to do is saddle the businesses that we are trying to set up with problems when they come to get their next round of funding. Situations where businesses that get funded have to use some of their new funding to pay off the loan would very likely put off the investor, because they want to invest in the future, not the past.

Start-up businesses find it very difficult to go to a bank to get a loan because for the perceived risks. Unless the terms of the new loans are to be very different, the same problems will arise.

Professor Luke Georghiou: I certainly support those comments. This does not feel like a policy that was based on a rational analysis of where the greatest deficits of business existed. It was probably more an analysis of the problems of public finances. If we get past that and look at countries that give loans as well as grants, there is a clear separation in what they do. Grant-based products are focused on areas of risk and R&D, and loans are usually targeted at market launch. Even then, they are typically very soft loans at very low interest rates and quite typically what is called conditional, in the sense that if you fail you do not have to pay them back, so they revert to being a grant. This risks creating perverse incentives to underreport success, of course, and some countries have experienced issues with that.

My bigger worry is that it is carving a significant amount out of the grant budget but it is not a large amount for loans. You would need to create an infrastructure to administer those loans, you would put those firms under completely new kinds of scrutiny of their assets and liabilities rather than simply their performance on a product, and it could turn out to be a very top-heavy activity unless very well designed.

Q15 Lord Hunt of Chesterton: I want to ask about international examples. We have recently heard about Siemens and what happens in Germany, where they have the Fraunhofer institutes, which are sort of governmental institutes. Laura Smith, you are involved in construction. One thing that people are very concerned about in the UK is the demise of the Building Research Establishment as a public sector lab. It is now a privatised lab; it has got rid of all its reports and a lot of its activity is now done in universities. You see this across the piece in the UK. International bodies comment that we do not have these big centres for data and expertise; the universities are now having to create them.

Do you feel that Innovate UK might participate in what is left of PSREs and their traditional role of support, data and so on, which is the beginnings of research? There is a big difference between the UK and Germany, in particular, where Germans from Siemens who visited here

commented on the fact that the catapults were doing projects but were not a long-term knowledge centre with people with long years of experience to provide the kind of information needed for small companies to develop their technology. Do you feel that more pressure might be put on Innovate UK to have this Germanic role? Has that been discussed?

Laura Smith: It has not come up with my members.

Dr David Hardman: Obviously, the original model of the catapult was based on Fraunhofer activities. The model that has developed in the UK is somewhat different, although not necessarily unsuccessful. You talk about an example in the building environment. Big data is the future, so wherever those chunks of data are held, whether in universities, PSREs or cities, the key question is the degree of accessibility of that data to SMEs—indeed, for anyone—the health side of things being an obvious example.

Lord Hunt of Chesterton: Is it the role of Innovate UK to help to provide this data or ensure that there are networks where data is provided?

Dr David Hardman: The Digital Catapult would argue that one of its roles is providing that sort of route to data, but not specific data within a particular area. Given the scale of trying to address that, you would be taking cash away from other aspects of Innovate UK's business to allow it to fulfil that role.

Professor Luke Georghiou: We have a long-term problem in innovation policy in the UK that goes back before Innovate UK or the Technology Strategy Board in that we are very good at designing policy measures—people come from around the world to look at them—but having designed them we run them at almost an order of magnitude smaller than we should. We are at fault on this issue in this area as well.

Lord Borwick: I go back to a question asked by Lord Cameron about the financial structures, particularly with reference to the R&D tax credit, which, when I was running a small SME, was paid gratifyingly fast: not as fast as the small company had to pay the taxman, but none the less the tax was paid back very quickly. In some of the papers, this R&D tax credit is described as an investment, as something that the Government should look after for the long term rather than a repayment of tax, which is the way SMEs looked at it. Am I overanalysing this, or do you see this as a trend whereby the Treasury or BIS would like to keep control of that R&D tax credit for the long term?

Professor Luke Georghiou: Without going into the details of the tax credit, I will make just one observation. There is something called the European innovation scoreboard, which classifies countries into leaders, followers and laggards. We are not in the leaders group, which is Denmark, Finland, Germany and Sweden. What they have in common is a highly effective innovation support mechanism that relies principally on grant funding and expert input from other countries, and they are the countries that are most averse to using tax credits as their principal instrument.

Dr David Hardman: I think that the tax incentives and incentives generally are aimed at promoting the successful growth of businesses. The return then is on the jobs, the tax that those people will pay and the tax that the company will pay when it starts to be profitable. To me, it is a longer-term return, but that is where the focus should be in any of these activities.

The Chairman: Lord Hunt, did you want to come back on the last question, or have we covered it?

Lord Hunt of Chesterton: The only other question I wanted to come back on was the way in which UK innovation policy and practice is internationally focused. In the United States, the Department of Commerce has a very strong team of people looking at innovation all around the world. In the UK, we produce 8% of the world's science—92% is the rest—but as far as I understand it, there is no team or significant group within BIS that looks at scientific papers and technological developments to find out what has happened here. I use my simple story. I have written two papers, both of which were taken up by the Americans. Within two months, a company was formed. I had nothing to do with it, but they thought it was a good idea. Nothing like that happens here.

Innovate UK's policy seems to be to apply UK research and science, but surely it should also be to apply science from all around the world in the UK. I do not get that message at all. In some sense, you could say that vice-chancellors are part of this conspiracy, as it were, to get the Government to fund research in UK universities all the time. Actually, one needs to do it globally. I wonder what you think.

Professor Luke Georghiou: I will certainly come back on the last point—not about vice-chancellors specifically, but about universities. We act as the large-scale radar to pick up the science and technology around the world and make it accessible to the firms in our regions. That is the best thing we can do for our smaller companies.

Lord Hunt of Chesterton: But do universities have an incentive to do that?

Professor Luke Georghiou: That is part of the reason why we wish to work with business. We are incentivised to work with business and do our best to do so.

Dr David Hardman: With a lot of these things we end up talking in silos. Innovation gets talked about, skills get talked about, inward/outward investment gets talked about, but they are all handled by different organisations. UKTI plays a major role in promoting inward and outward investment. How well is that connected to what goes on in Innovate UK and elsewhere? Everyone talks about an ecology for innovation. That by definition is not a linear process: if you change one thing it will impact on something else. We may need to look at how we are siloing some of the questions and delivery mechanisms in what in reality is a very fluid environment.

Q16 The Chairman: To come back to the central issue that we have referred to several times this morning, we have a proposal here in a Bill that is going through Parliament; it is not a draft Bill any more, it is a Bill. The proposal is for a single institution in which Innovate UK will quite frankly be the junior partner, whether we like it or not, and its job will be to co-ordinate all discovery and commercially-oriented research and development funding. We have heard repeatedly that a single institution is an unusual model, although for small economies such as Iceland it might be appropriate. Do you think that there is any rationale for this single institution? I think you have made it fairly clear that you have reservations. What would be your solution to reconciling these two competing needs?

Laura Smith: I think we have already put forward the rationale of the possible benefits: greater interaction and partnership between the research community and the business innovation community.

Your second point was about the mechanisms—we would call them safeguards—that would need to be put in place as we go through the Bill process to ensure that the influence of Innovate UK is not diminished. We can explore this in a bit more detail, but one safeguard is

a hypothecated budget. There is a huge disparity between Innovate UK's budget and the research budget, and therefore it should be protected. It needs to maintain its business-focused mission, purpose and values. There should be business representation on the main board of UKRI. Those are a handful of our early thoughts on how to ensure that the move towards a single institution is not detrimental to business innovation.

The Chairman: Would either the professor or Dr Hardman like to add anything?

Dr David Hardman: From my point of view, if it is going to happen—it sounds as though it is—Innovate UK will be inside a large structure. For it to be successful, it needs to be linked and reach out to other infrastructures that are driving the innovation agenda. Perhaps something might come out of the science and innovation audits. Perhaps something might come out of the Northern Powerhouse, the Midlands Engine and all such other structures, all of which are about driving innovation. If it is going to happen, let us allow it to connect at a regional, potentially local, level to ensure that it gets input from the grass roots, not just from the top.

Professor Luke Georghiou: I agree with all that has been said. We are where we are. There is no doubt that it will be integrated, so the key at this point is to mitigate the kind of risks that we have been talking about by ensuring that certainly, the distinctive missions, but also the means of operation are maintained for the three different kinds of body that will sit inside the new organisation. Then we can move on to focus on the opportunities that are opened up: potentially better co-ordination and vision-building not only across these organisations, as I said, but out to other bodies and into our regions.

The Chairman: Lord Broers, a last word?

Lord Broers: I have just a general question. We received written evidence today from the Government, from the Department for Business, Innovation and Skills. Under its bullet point 5, it states: "The Global Innovation Index 2015 placed the UK as the second most innovative nation in the world behind only Switzerland. This is up from 14th in 2009". That conflicts with what some of you have said. Do you agree with it?

Professor Luke Georghiou: Each index is based on what they choose to have as the indicators.

The Chairman: So there are lies, damn lies and statistics. Is that what you are saying? I, too, was slightly puzzled by that index. I was not sure where it came from. We have the opportunity to ask the Minister next week, so let us ask him that one.

Lord Broers: I think the level of funding is quite important. Would you agree that the most frequently cited number is 1.7% of our GDP on R&D, which is below all our major competitors?

Professor Luke Georghiou: Yes.

Dr David Hardman: I would agree with that.

The Chairman: I must bring this session to a close. You have helped us a lot. As I just said, we have the opportunity to talk to the Minister next week about this and we will then write a letter. I know that your contribution today will help us enormously in formulating our thoughts. Dr Hardman, Laura Smith and Prof Georghiou, thank you very much for your help this morning.