HOUSE OF COMMONS

# Scottish Affairs Committee

## Oral evidence: Universities and Scotland, HC 673

Wednesday 9 December 2020

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Watch the meeting

Members present: Pete Wishart (Chair); Mhairi Black; Deidre Brock; Wendy Chamberlain; Alberto Costa; Jon Cruddas; Sally-Ann Hart; John Lamont; Liz Twist.

Questions 134 - 176

### Witnesses

I: Rachel Sandison, Vice Principal, External Relations, University of Glasgow, and Member of the International Committee, Universities Scotland; Professor Tim Bedford, Associate Principal (Research & Knowledge Exchange), University of Strathclyde, and Member of the Research and Knowledge Exchange Committee, Universities Scotland; and Professor Nigel Seaton, Principal and Vice-Chancellor, Abertay University, and Executive Member, MillionPlus.

# Examination of witnesses

Witnesses: Rachel Sandison, Professor Tim Bedford and Professor Nigel Seaton.

Q134 **Chair:** Welcome to the Scottish Affairs Committee. Today we are looking at Scottish universities and UK research and some of the bigger European issues and questions. We are delighted to be joined by a stellar cast, as always, to help with the evidence. We will start off with short introductory statements.

***Professor Seaton:*** I am Nigel Seaton, principal of Abertay University and a member of the executive committee of MillionPlus, which represents modern universities across the UK, including all seven modern universities in Scotland. I have been principal of Abertay for eight years. I previously worked at a variety of other universities, including the University of Edinburgh, several other universities in the UK and in the United States.

I will say a few words about my own university. Abertay is a relatively small university in the city of Dundee, with many students from Dundee and the surrounding area. Like other MillionPlus universities, we have a very strong sense of social mission and teach students from a very diverse and wide range of backgrounds. We are also a university with international reach, particularly in the areas of computer games and cybersecurity.

***Rachel Sandison:*** Thank you very much for having me along today. I am Rachel Sandison, vice-principal for external relations at the University of Glasgow. My remit covers quite a broad area, including all things internationalisation, international partnership development, fundraising, alumni relations, marketing, student recruitment and admissions, and the widening access agenda. I also represent the University of Glasgow on the Universities Scotland international committee, and I am also the senior leader for the University of Glasgow on a number of our international network partnership activities.

As you will all be aware, the University of Glasgow is one of the oldest universities in Scotland and the UK, and one of the largest as well, with a student population of around 30,000 and with a very high proportion of our student population and community coming from overseas. We have around 7,000 international students currently studying with us, and around 3,000 students from the European Union. I will stop there.

***Professor Bedford:*** I am Tim Bedford. I am the associate principal for research and innovation. I am also professor of risk management in the business school at Strathclyde University. As I am sure you are aware, Strathclyde is the only Scottish university founded during the enlightenment. We are a place of useful learning and a leading international technological university. As well as being a research-intensive university, we are very strongly focused on industrial engagement and impact on society and the economy.

I should also say that I am involved on the board of CESAER, which is a European consortium of universities of science and technology. I have been strongly involved with Universities UK in some of the development of recent international research proposals for what would potentially come in place of Horizon engagements.

Q135 **Chair:** Excellent. Thank you all very much for those very concise introductory remarks.

Can I kick things off by looking at the whole range of collaboration that we have with the EU on teaching, learning and research in Scottish universities? Could each of you talk about the overall impact this has on your institutions, on Scottish learning and on our university sector in all its totality? It is a very small question to get started with.

***Rachel Sandison:*** The impact of European partnership is huge, and it is not an overstatement to say that Brexit, without association to Horizon Europe and Erasmus+, will be more detrimental and more damaging to the higher education sector in Scotland than the current Covid-19 pandemic. European engagement is absolutely fundamental, and we want to protect that at all costs. This is not just about the economic benefits of bringing EU students and international students to our campuses but also in terms of how those students enrich our campuses. We are creating multinational, multicultural learning environments for our students, and that is a tremendous benefit to our home students in Scotland as well.

Clearly, one of the key benefits of Erasmus+ has been that student mobility and the opportunity for reciprocal exchange. That is something we are passionate about being able to maintain going forward, ideally through association with Erasmus+ but, if not, then certainly as part of a new mobility framework that will be nationwide within the UK.

European partnership and European engagement across research, learning and teaching, and staff and student mobility, is mission critical for the higher education sector at this time and will continue to be so.

Q136 **Chair:** I am grateful, thank you. Professor Bedford, you will obviously give your own take on the initial question, but will we still continue to have that global reach when we start this new relationship with the European Union? What impact will this have, and what do you feel this will do to all the fantastic engagement exercises that Scottish universities do?

***Professor Bedford:*** The fundamental question is whether we are or are not associated with Horizon Europe going forward. To date, we have been automatically associated with the European funding programmes, the Horizon programmes, through our membership of the European Union. What we will now have to do, if it is at all possible, is to negotiate an association to the European programmes. That is not the only way you can be engaged with the European programmes, and I will come on to the alternative in a second, but just to indicate the hole that is going to be left if there is no kind of agreement, Scotland as a whole secured €755 million over the six-year Horizon 2020 programme. That is 1.3% of the

total budget that came to Scotland on its own, and higher education institutions got 81% of that. In fact, businesses also got £110 million, of which most of it went to SMEs. There is potentially a huge funding gap if we are not able to associate.

Of course, it is not just about the funding; it is also about partnership and collaboration, because research is very much a partnership and collaboration activity. If you want to be the best in the world, which, of course, we all do in Scotland and we have an excellent system, then you also need to collaborate with the best in the world. The key point about Horizon is that it is the world's biggest and most successful multinational research partnership. It is not something that you can replace lightly. It enables European researchers to collaborate with the very best across all of those associated countries.

I can give a couple of examples from my own institution that might help to put this into perspective. EPRC is a research centre at my university. It is called the European Policies Research Centre. It is focused on regional European policy. As you can imagine, it is not the kind of topic that is very easily done from outside the European Union. In fact, it will be very difficult. I think that particular unit had about 80% of its funding coming from European programmes or from important European stakeholders, who probably would not want to engage with a research centre that is positioned outside the European Union.

What we had to do very quickly after Brexit was to establish a foundation based in the Netherlands. It is hosted by Delft University of Technology, and now we have a number of Strathclyde staff members who are based in the Netherlands, giving us a legal footprint there and an agreement to work with the university proper. This is a strange and expensive construction that enables us to get around the impending problems of Brexit, but it is a costly way of doing things.

Another example that is interesting to understand is our naval architecture department. We have one of the few naval architecture and maritime engineering departments in the UK now. There used to be many of them; they have been consolidated. There are very few now in the UK. That means that if you were only to look at UK funding, it would be very difficult to justify a large programme of research funding going into those sorts of departments. Indeed, there is not a lot of funding for research into maritime technology. Of course, for Scotland that is potentially problematic. Previously, they have always been able to get a lot of funding via the European programmes and collaborate with other coastal nations across Europe. That gives them a critical mass, which you require in international collaboration to benefit from.

Q137 **Chair:** Lastly on that question, Professor Seaton, we have heard a lot about collaboration. Will this be an ongoing priority, developing these new relationships and new ways of networking?

***Professor Seaton:*** Yes, it will. I won't repeat the very good points made by my colleagues, but I will perhaps say something from the point of view of a university like mine, a modern university.

We depend on research connections and engagement within the EU as an ecosystem. Higher education is fundamentally international and our partnership with the EU is something that cannot be easily replaced, should it need to be replaced and should we not have the kind of relationship we might like later.

I want to say something particularly about the impact on our students. We have students, as I mentioned, from all over the world but very many locally. It is really important for them to have an international experience. Most of our international connections are within the EU. These can be replicated and replaced in some sense but not in the short to medium term. We depend on those relationships. It is partly about students being able to go on exchanges and travel abroad, which is great, but many can't do that. It is important for them to be able to sit in a class where there are international students and sit next to an international student. That is also an international student of a kind. As I said, there are connections across the world, but the connections within the EU are important. To sustain that or to find a way to supplement it in some way is really important to us.

Q138 **Chair:** In all the evidence sessions we have had, we are hearing an awful lot about the value of international students, the cultural advantages that gives to indigenous Scottish students of universities and the capacity that builds in internationalism. We have also been told not to worry too much about leaving the European Union. Quite a lot of these students who come to Scottish universities are obviously non-EU. Are we unnecessarily worrying about leaving the European Union and the impact that this will have on—an inelegant word—the internationalisation of our universities and the ongoing advantages and features it gives?

***Professor Seaton:*** I am trying to find a balanced position here. Of course, countries that are not members of the European Union and have never been members are perfectly able to maintain an international network and maintain an international character to their higher education. The network that we have within the European Union was built up over decades. It is something that is geographically relevant to us, being so close to Europe, but it is also our ecosystem. It is the ecosystem within which we live.

While it is possible to create networks that replace Horizon Europe, networks that could replace, should it be necessary, Erasmus+, these are not easy to do, particularly in connection with research networks. We are in unknown territory here, but my guess is that it might take us up to about 10 years to fully replace the kind of ecosystem that we are benefiting from at the moment. It is not to say that we can't do it, but it is a slow process, just as building up the ecosystem within the EU was a slow process.

Q139 **Chair:** I see you vigorously shaking your head in agreement, Professor Bedford, so I presume that you very much agree with that.

***Professor Bedford:*** That is correct, and maybe I could add another dimension in support of what Nigel has said. Obviously, we talk here about the student experience and the staff experience. I think there is a much longer-term issue that arises here. If you look at the population within the university, there is a very high proportion of international staff. If you look at the proportion of people who are working in high-value, knowledge-based functions in our industries, a large proportion of those people have come into the country from Europe in particular. They have come through doing courses, potentially going on to PhDs, then staying in the country, adding talent and creating wealth for the nation. There is a real risk that, if we do not manage this transition very carefully, there will be a break and the flow outwards of talent to other international centres will continue. If we block off the stream of talent that is coming in, there is a danger of a brain drain over the next 10 years, which would have potentially disastrous consequences.

Q140 **Chair:** Lastly, Ms Sandison, I think you are going to agree with most of that.

***Rachel Sandison:*** I agree with all of it. I am very conscious of not wanting to simply repeat what my esteemed colleagues have said.

To further some of the arguments that have been made, I think that we absolutely should be concerned about the loss of EU talent in our communities. This is not just about the internationalisation agenda writ large because, of course, we hope we will continue to see a growth trajectory of international students making their home in the Scottish higher education sector. We are predicting a significant decline in numbers of EU students because of the changes to the fee status and immigration rules and regulations as well.

For a university like Glasgow, which has a large European community, we are looking at a loss of perhaps around 80% of EU students from next year onwards applying and coming to our institutions. Why does that matter? It matters for all of the reasons that have already been outlined, but it also matters because these are incredibly high-quality students we will be losing for our communities. They particularly gravitate towards subject areas that are very hard to recruit to from within our local Scottish ecosystem.

These are students who are coming for physical sciences. We have lots of EU students who are coming for physical sciences and computing science, and we are not seeing that growth in applications and interest from a Scottish community for those subject areas, which may put a question mark over the viability of some of those programmes in the medium to longer term.

There is a real issue about the loss of EU talent in the student community but—absolutely to Tim's point—around the staff community as well. The new skilled workers route, while we will do everything we can to make

that work effectively, could see us losing a lot of EU talent at the technician and language assistant level because of the salary level that has been put into place. This goes across our whole community, in terms of our ability to recruit talent into our student programmes but also into early-career researcher opportunities and into our staff community as well.

**Chair:** That is great. Thank you all ever so much for that. That is enough from me, and I will hand over to my colleague Mhairi Black.

Q141 **Mhairi Black:** Thanks to our witnesses for giving us their time and expertise. What would be useful for us as a Committee is if you could paint for us a picture of the engagement that you have had with the UK Government and what the responses have been when you have raised some of the concerns that you have already mentioned.

***Rachel Sandison:*** We have been engaging proactively through Universities UK International first and foremost. It has been lobbying and engaging on a regular basis with BEIS and the Department for Education. We have been feeding into a number of roundtable discussions, particularly on what the future of a national mobility framework may look like. Those discussions have been constructive. We have welcomed the opportunity to feed into those.

There is still quite a lot of dubiety around what these programmes will look like and how quickly the UK can put these things into place should we have to. There is quite a lot of uncertainty and risk attached to much of this, but I would say that Universities UK International as a sectoral body has been doing a fantastic job of being the voice of the sector into the UK Government, and we have been supporting that.

More locally we have been engaging with Universities Scotland and the Scottish Government on a range of opportunities, particularly around new European scholarship schemes, for instance. I know that Universities Scotland has always felt it has had a very open ear from the Scotland Office and the Scottish Government.

We have been engaging. What is less clear to me is how actionable some of the insight has been or will be going forward.

***Professor Bedford:*** We were very pleased to see that the UK Government, in their "R&D Roadmap", had highlighted the fact that they wanted to be associated with Horizon Europe going forward. It is very positive, and also that they reserved funding to be able to pay for that. I think the message from the universities sector that association to Horizon Europe is really important has certainly got through.

What I am less certain about is whether colleagues in government, the civil service and so on, really understand the difference between association and third-country participation. There is a world of difference between those two levels. I have already said how bureaucratic and costly it is.

It is worth remembering that Switzerland, which is another country that is associated but not a member state of the EU, was excluded from associated status between 2014 and 2016 because of a completely different dispute. It was a dispute around immigration policy in Switzerland, but it was removed from association. It had to put in place all these different mechanisms to operate under third-country rules and it has been suffering greatly. As soon as it was able to resolve that, it got straight back in and was able to participate, but it is very much a second-class way of engaging with it. It is understanding that it is not just about being able to be part of projects; it is actually the full participation of association that is really vital.

***Professor Seaton:*** I don't have a great deal to add to what my colleagues have already said, except to say that I would agree there is generally a good understanding of the impact of Brexit on universities in Scotland, and in the rest of the UK, and on what measures could be taken to mitigate those impacts. Of course, as we are sitting here today, that is tied up with the discussions about trade deals. I think the understanding is there. The doubt about it is where we will end up in the trade discussions and everything that goes along with it, such as how participation in the European research area and so on will turn out and, if we do not have a deal, what the mitigating measures would be.

To build on what Tim said, I would make the point that mitigation, in a strong sense, isn't possible with some of these things. If you are not a participant in Horizon Europe—and preferably at associated country level—that kind of interaction is not simply a question of spending money. We are very reassured by the commitments to spend money, but there is a fundamental challenge in creating at fairly short notice that kind of international interaction. That is a fundamental problem.

Going back to the point of your question, we think there is generally a very good understanding and we have had productive interactions with the UK Government.

Q142 **Mhairi Black:** Following on from what you have said, you have actually answered what my second question would be. Let me press a little more on what assurances the Government have given you, if any, to allay some of these concerns. Like you say, there are pretty drastic consequences if there are not contingency plans in place. Have you had much engagement in terms of making these plans, or even sight of what these plans might look like?

***Professor Bedford:*** As I have said, we have tried to lay out the difference between association and third-country participation. One of the key differences there is that big schemes—what is called a mono beneficiary, single-researcher schemes such as the European Research Council and the Marie Curie fellowships—are not available if you are not associated to the country.

What we know is that the UK Government and UKRI have been working on a fallback scheme, the Discovery Fund. This was set out in the "R&D

Roadmap" again, and we know they are moving ahead with that. We have been engaged in discussions, through Universities UK International, about what the shape of that scheme would be, and we know it appears to be being accelerated rather quickly. There are schemes in place for those mono beneficiary elements, and that does suggest that there is a backup plan if we are not able to achieve full association.

***Rachel Sandison:*** On the Erasmus+ side, it is a lot less clear what the direction of travel is. There has been this national replacement scheme mooted that the sector has had the opportunity to feed into, but there are still quite a number of red lines. For instance, there is speculation that the UK programme would only fund exchanges and not operate on a reciprocal basis, so it would not be a two-way exchange, which I think would be hugely detrimental to the sector and to our student communities. It may also not cover staff mobility.

Although we have had 3,000 students from the University of Glasgow who have been able to go on exchanges since 2014, we have also had a similar number of staff who have benefited from a period of time overseas learning from colleagues in a different environment, which has been fantastic. To have that not encapsulated within a new framework would bring real challenges to the sector.

There is also an awful lot that has not quite been agreed as to what will happen, as the clock is ticking down, if we do not have association come the beginning of next year and we do not have a national replacement scheme in place. What does that mean for our students in the short to medium term?

Unfortunately, on the Erasmus+ side of the house, although I am sure there are lots of discussions taking place and our hope very much is that we can continue association, there is a great deal of uncertainty as to what a national replacement scheme will look like if we have to go down that route.

***Professor Seaton:*** I would add, just to emphasise the contrast, that Scottish universities now have partnerships with foreign universities outside the EU. These are bilateral university-to-university relationships typically and they are negotiated separately. They are usually constrained, more or less, to be exchanges in the sense that, if three of our students go to another university, three come back. That is the way they work. The financial support for the students is not there as a routine matter in the way it is with Erasmus+. As Rachel has said, typically, it is hard to arrange staff relationships. You can do it—we do it already—but it is not a complete substitute.

To work out something that could be a complete substitute with the funding arrangements, perhaps not bilateral but multilateral, is a big piece of work. It can be done but, again, one would expect some disruption and opportunities for our students to engage internationally in the short run will be quite difficult to sustain over the next few years. It can be done in the long run, but in the short run Erasmus+ is pretty

difficult to replace, in the same way as these international research partnerships are difficult to replace without operating through Horizon Europe.

**Mhairi Black:** Excellent. That is really helpful. Thank you.

Q143 **Deidre Brock:** Going back to something you said, Professor Bedford, about the "R&D Roadmap", which has reserved funding within it to pay for associate membership of Horizon, does that mean the UK Government have committed to replace in full the Horizon funding for universities?

***Professor Bedford:*** I think it simply means they have reserved funding to be able to participate should that be agreed as a result of the negotiations. In other words, if the political agreement is made, there will not be a funding issue at that point. Clearly, if the association agreement is not made, hopefully that funding would be available to support the alternative measures that we would then have to create.

Q144 **Deidre Brock:** You have been given no guarantees that that would be the case?

***Professor Bedford:*** No.

Q145 **Deidre Brock:** Because you mentioned €755 million, I think. I cannot remember the time period that covered.

***Professor Bedford:*** That was over six years.

**Deidre Brock:** It was the last programme; six years, yes.

***Professor Bedford:*** Yes, that was the total amount coming to Scotland.

Q146 **Deidre Brock:** Right, gosh, okay. You have all mentioned the uncertainty that you are all feeling as a result of things. The implications of that are enormous for a variety of programmes, obviously. You mentioned a couple of examples, but are there particular research programmes or workstreams in Scotland that would be most negatively impacted if the UK does not participate in Horizon Europe?

***Professor Seaton:*** Perhaps if one looked in a very detailed way across all the research areas, one could identify some. It is not so much a specific problem with certain areas. It is really a system-wide problem of possible reduction of opportunities for collaboration. If we think particularly about the values of those collaborations, it is the formation of teams being created over many years. Typically, these collaborations will endure for many years.

That is what we will lose if we are not able to participate effectively with Horizon Europe. As Tim has pointed out, there is the third country and better than that is associated country, but, if we cannot participate pretty fully in that, it will affect the research performance of Scottish universities because research does not have any collaboration.

Going back to the point about money, I don't want to make it sound like money is not important. Money is vital. We are talking here substantially

about money, but I am reassured by the UK Government's position that funding will be provided to replace the funding that goes in one way or another through the various European programmes. That is only a partial answer. The money in itself does not buy collaboration. I don't want to create the impression that we do not worry about money; we worry about money all the time. It is the collaboration that cannot be bought through spending, and that is really where the level of doubt lies, not so much with the money.

Q147 **Deidre Brock:** I appreciate that. As Ms Sandison said, it is not just the economic benefits, it is the social and cultural and many other aspects of it that are important.

***Rachel Sandison:*** I completely agree with everything Nigel has said. Perhaps to give some examples specifically from the University of Glasgow's perspective for context, the University of Glasgow has been awarded funding of over €170 million for different international collaborative projects. Around 50% of these projects are collaborative in nature and they lead to partnerships with over 800 different organisations. That is industrial organisations as well as leading universities and research institutes. There is a question mark over how easily replicable that will be with any new scheme.

One other example is that the University of Glasgow is involved in a particular project around the Zika crisis. Through that, we are collaborating with 25 leading research and public health organisations across Latin America, North America, Africa, Asia and Europe, with total funding of €12 million attached to it.

That is just one of many projects that we are engaged in, but that gives you a sense of the scope and scale of the activities that the Scottish higher education sector currently has the opportunity to participate in and contribute to. That is where our concerns lie as to whether any kind of ERC replacement at a UK level will be able to afford us the same kinds of opportunities that the ERC does in Horizon 2020.

**Deidre Brock:** You are nodding very enthusiastically there, Professor Bedford.

***Professor Bedford:*** We are all in complete agreement here. Let me add another point to this that complements the answers you already have.

We have been a member of the European programmes for many years, obviously, and one of the reasons that the European research programmes are so strong is that we have been very active in helping to develop them. What has emerged is a fantastically well-developed European set of programmes. It is not a single programme; it is a set of complementary programmes that address different aspects of research and impact on society.

When I say "complementary", it is not just within the European programmes; it is also complementary to our UK-based programmes. If you take away the European programmes, the whole system is poorer

because that complementarity, the synergies that have developed over the years as a result of the evolution of the system to be a very effective research funding system, all drop away.

To come back to your point about specific areas that do not get funded, it is absolutely fair to say that in, for example, social sciences and the arts, there is probably greater funding available through the European programmes than there is historically through the UKRI programmes. That is just because of the relative levels of funding that have been available. It may also be because some of those naturally work better at a European level than they do at a national level.

In addition, the synergy between the different programmes is not even just about the research programmes because the structural funds, which are, of course, categorised as a different set of European funds, have been extremely important in providing some of the basic infrastructure for excellent research.

The replacement fund for the structural funds is going to be the Strategic Priorities Fund. At the moment we do not have any idea how that is going to work. We don't know where it is going to be based and what the influence will be of the devolved Government or of cities, for example. As far as I am aware, there has not been any clarity about whether that can be used to support research and innovation infrastructure. That is a key area where I think there is a big gap that needs to be clarified. If it is not going to be used for that, we need to find other forms of funding for it.

Q148 **Deidre Brock:** That has been brought up before by other witnesses, in fact.

You mentioned colleagues in the EU and people you have been collaborating with over a long period of time. What is the impression you are gaining of their views on all this? I note that the EU Commission's director-general for research and innovation is suggesting that the EU's next research programme will be more impactful and more powerful if the UK joins as an associate member of Horizon. In your experience, is that viewpoint shared by your colleagues within EU academia and the EU itself?

***Rachel Sandison:*** Yes, absolutely. That is one of the really fortunate elements of what is a very unfortunate circumstance of Brexit. In some ways that has allowed us to connect in with our European partners, who have been incredibly supportive and very keen to ensure that they are stating publicly their desire to continue to work with UK institutions post-Brexit and post the end of the transition agreement.

We are continuing to do a huge amount of work with European partners. We have strategic relationships with Radboud in Nijmegen in the Netherlands, and the University of Glasgow also established just last year an independent research institution, which was established between the University of Glasgow and Leuphana University of Lüneburg in Lower Saxony. We are hoping that in itself, as an independent research

institution, will help to facilitate broader collaboration and engagement across Scottish universities and universities in Lower Saxony.

It is not only that we will continue to develop our existing partnerships within Europe, but there is a real desire to develop new and innovative partnerships as well. One of the fantastic outcomes is that there has been such an outpouring of support for the UK, and I think European institutions recognise that the UK and Scottish universities, in particular, are powerhouses for research. If you look at our output, what Scotland's higher education sector contributes is phenomenal. Universities want to be able to continue to access our talent. We want to continue to hold on to that talent. That might be a little trickier, depending on how things develop over the next year, but at least for now there is a real sense that partnership across the EU and the UK is not only desirable but incredibly beneficial for both parties.

**Deidre Brock:** They are very keen to see that collaboration continue strongly, okay. Professor Seaton, you were nodding your head.

***Professor Seaton:*** It was simply to agree with that. I don't have anything to add.

**Deidre Brock:** Thank you. Professor Bedford?

***Professor Bedford:*** I have a couple of examples of that from my side. I mentioned the European association for universities of science and technology, CESAER, of which we are a member. That is a stakeholder partner for the European research area, which means it has to be consulted by the European Commission. That organisation has been lobbying very strongly that, first, the UK should be very strongly involved in the future and, secondly, that we should be associated. That was not at all controversial across any of the members. There was full support for that. Our European partners there are firmly supporting continued collaboration.

At an individual institutional level, for most of them the UK is either the biggest partner or the second largest partner in their own collaborations. If we fall away, there is a big hole in their framework for collaboration because they are so used to collaborating with the UK and Scottish institutions.

It is also worth saying that we are all responding in the way that Rachel has just outlined for Glasgow. In fact, a couple of weeks ago we were all on the same call together with universities from Lower Saxony because Strathclyde also has a partner in Lower Saxony, which is the Technical University of Braunschweig. It is a university that does things like we do. It has Fraunhofer associations. It has industrial collaborations with aerospace and with Volkswagen, and it does a lot in manufacturing. For that kind of organisation, there are very strong synergies between us and them.

I just mentioned Fraunhofer, and that is something that we have imported into Scotland. Scotland is the only country of the UK that has a

Fraunhofer institute. That kind of institution is also vital for the future of the economy. It has worked wonders for Germany and it can work wonders for us as well, but we have to be able to have frameworks for support. The European programmes, again, are very important for that.

Q149 **Deidre Brock:** Absolutely. Thank you very much. I did not realise that about the Fraunhofer organisation. That is very interesting.

We have discussed Horizon quite a bit, and I wonder if we can shift quickly to the Erasmus+ programme. Could all three of you give an indication to those watching of the importance of the Erasmus+ programme to you, to your institutions and to your students in particular, and the impact that has had over the years? You have given us some indication, but what certainty do you have about support from the UK Government moving on from here?

***Professor Seaton:*** Dealing with the last point first, I am content with the support that we have from the UK Government, but it all depends on the negotiations that are happening as we speak. We have to see how it turns out, but we are content with the support, at least I am.

To emphasise your first question about how important it is, we have international exchanges across the world, the great majority within the EU. This is partly because of proximity, it is very natural, but it is also because the Erasmus+ system gives a much more favourable framework than the typical bilateral arrangements we can make across the world, particularly in student support. They do not need to find any additional funding. We support our students travelling internationally, but there is a limit to what we can do.

The Erasmus+ system gives a ready-made package. Also, as I think was mentioned earlier, it has an element of project funding that is multilateral, which allows universities to participate in projects across the EU member states and, indeed, with other countries. It is a very powerful system that cannot be easily replicated, so it is very important to us for that reason.

***Rachel Sandison:*** Again, I would echo what Nigel has said. For some context, between 2014 and 2018, Erasmus+ funded 164 projects and 17 strategic partnerships in the higher education sector in Scotland to a value of over €55 million. It has been incredible in terms of what it has allowed us to deliver in partnership, not just within Europe but across the world. That is a really important point to note. This is not just around facilitating exchange in Europe, although that is a really important part of Erasmus+, but there is also international credibility. It has allowed us to establish really innovative programmes and projects with international partners, and it has allowed international engagement for staff and students as well.

The other thing that is probably worthwhile highlighting is that the next phase of funding for Erasmus+ will double in size to €30 billion for 2021 to 2027. It is not just about us trying to match what the current funding envelope is for Erasmus+ and how the UK benefits from that, but

thinking through what we would be losing if we were no longer associated with Erasmus+ for the next period. It is not just universities that benefit; it is colleges and schools. It supports community activities and it completely enriches what we are able to deliver within and outside of our organisations.

I am ever hopeful that we will continue association through Erasmus+. If we don't, I think we will absolutely look for some certainties with the national substitute to ensure it does not end up being a successor scheme that is inferior to what we currently have with Erasmus+.

Q150 **Deidre Brock:** Do you want to add anything, Professor Bedford?

***Professor Bedford:*** Very briefly, I completely agree with the comments that have been made. In this particular case: location, location, location. We are on Europe's doorstep. We may be leaving the European Union but we are not leaving Europe, and it is the easiest place to get to. It is the easiest place to create an international experience for our students.

The last thing we want to happen is that, by leaving the European Union, we become inward-looking and closed off to the rest of the world. It is absolutely vital for our future generations that we get them out there and get a fantastic international experience for our students, and we can do it most easily in Europe.

**Deidre Brock:** Thank you very much for those answers, all of you.

Q151 **Chair:** On Erasmus+, if the UK in its infinite wisdom decides not to participate further in this, what options are open to Scottish universities? Is there another scheme that we can readily participate in? You have talked a lot about collaboration, and it is fascinating to find out exactly the reach you have among European institutions. Is there another ready-made scheme that we can opt into? Is there anything that Scottish universities could do as a group—as a bloc distinct from the rest of the UK—to engage in the range of projects that is or is not available to the rest of the European Union?

***Rachel Sandison:*** I think not, not in terms of an oven-ready scheme on the scale and scope of Erasmus+. There sadly is not, or we would be lobbying the Scottish Government around that already. So, no, not at this moment in time, unless my colleagues have other ideas about what we could opt into.

Q152 **Chair:** Is that basically what the options are? We are either in or out? Is that basically it?

***Rachel Sandison:*** Yes.

***Professor Seaton:*** As far as Erasmus+ goes, yes, we are in or we are out but there is an element of commonality with Horizon Europe. They are very well established, big and successful international collaborations: one in the area of student and staff exchange and one in the area of research. There is no direct substitute for it. There are ways of working around it. The ways of working around it are likely to be slow in

developing. They are difficult to work out—there are some technical challenges—and it is difficult to make them an adequate substitute in the short to medium term. It can all be done.

I made the point earlier about countries around the world collaborating. Of course, you can do it without participating in Erasmus+ and you can do international research without participating in Horizon Europe, but given that that is our ecosystem, that is our neighbourhood, it is really quite difficult to do it in the short to medium term.

Nothing is impossible but there is a disruptive element that I do not think clever design and working eagerly, which we will all do, can quite substitute for in the short term, and probably in the medium term. I think that applies to collaborative research as well as it applies to student and staff exchanges and these other kinds of collaboration.

Q153 **Chair:** Professor Bedford, is that roughly your view?

***Professor Bedford:*** Absolutely. While the UK Government have been planning some successor schemes, I think they are still very much on the drawing board and the issue is really one of scale. Chair, you have suggested that maybe Scottish universities could pull together to create a scheme but, again, it is a question of reach and scale. At the moment, we have that—Erasmus+—and why break something that has been designed to be a very good scheme over so many years?

Q154 **Chair:** Do you think that, when the chips are down and a decision has to be made, that the UK, in its infinite wisdom, will decide that this is so efficient and effective and has served us so well that we will stay in? Yes or no, or do you have a very good reason—

***Professor Seaton:*** Could I suggest that you ask No. 10 Downing Street? It sounds like a facetious comment, but I am very satisfied that the UK Government appreciate the virtues of Erasmus+. The question is: how will it sit with the wider negotiation? If I have to guess, in terms of probability I would guess that probably we will be, but it is a complete guess.

Q155 **Chair:** That is one yes. Ms Sandison? It is almost like a *Strictly* jury, isn't it, the casting vote?

***Rachel Sandison:*** That is right. It is really tough and I am sorry that I am going to be slightly on the fence with this one. I have always been a bit more sceptical about continued association with Erasmus+ because I think so many discussions have taken place around a successor framework. On the negotiating table, it may be the one thing that we are willing to lose in order for other concessions to be made. I really don't know. I hope and pray that we will continue our association, but I am perhaps less convinced at this stage.

***Professor Bedford:*** Again, I think the European side recognise the strengths, and of course they are looking for an English language experience for many of their students, so it is very, very popular. From

their side, I think it would be something they would be very sad to give up on. From the UK side, it all depends on the politics, as we know.

**Chair:** Imagine that, problems all depending on the politics.

Q156 **Wendy Chamberlain:** Apologies. I have just come back from the Chamber, so I may refer to topics that have already been discussed.

The first thing I want to ask is on a slight tangent. I was on a call this morning with the Scottish Immigration Minister, Ben Macpherson, and one of the questions that came up was what impact Covid may have had on EU university students applying for pre-settled status. I would like to open up that question before I move on to my other questions. Do any of the panel have observations on that?

***Rachel Sandison:*** Unfortunately, I do not have any firm data that I can share, but I would be very happy to take that offline with colleagues and make a written response for information.

We have been very clear on profiling the need to arrive in Scotland, in the UK, before 31 December in order to apply for pre-settled status. We anticipate that a number of our incoming new students will choose to do so. At this moment in time, I do not have any figures that I can share but I will certainly take that away and will be happy to report back.

Q157 **Wendy Chamberlain:** Thank you very much. I think the reason why the question came up as a topic of conversation is that some international students have potentially not come into the UK to commence their studies because they have been doing them in a virtual format and whether that is creating a challenge, so I said to the Minister that I would ask. Do either of the other panellists have any observations, or are happy to take it away?

***Professor Bedford:*** I don't have any specific information on that, so I would also have to take that away.

There are potentially issues around staff as well, because obviously we will have recruited new staff. Some of them will have continued to work during Covid from their original homes—obviously, it is rather difficult to move from country to country at the moment—so there are potential issues there as well. It is very difficult. We have tried to go out to those staff to give them information about the need to be here and to make sure that they are known to the tax authorities, and so on.

Q158 **Wendy Chamberlain:** That is very useful. Moving on to my area of questioning, which projects do you think will be most affected by the withdrawal of EU structural funds?

***Professor Seaton:*** The projects that are most likely to be affected are the ones that are inherently collaborative, such as the inter-regional development programmes, in which my university and very many other universities collaborate. They are particularly important to some of the universities in the MillionPlus group, the group of modern universities. As in the case of research funding, it is the collaborative element of it rather

than the financial element that is harder to replicate. The place-based funding, the shared prosperity fund, is very welcome, but that will only address some of the coverage that we have from the structural funds and not so naturally involve international collaboration. That is where my reservation would lie.

Q159 **Wendy Chamberlain:** Do you feel there will be a gap, in terms of the amount of money plus, dare I say it, timing as well, as we leave next month?

***Professor Seaton:*** I hope there would not be a gap in getting the new scheme running. Potentially, that is manageable. The thing that is not so easily manageable is the element of it that involves international collaboration, which will require more work to develop.

Q160 **Wendy Chamberlain:** Professor Bedford, your thoughts?

***Professor Bedford:*** I don't have a lot to add. I would just reiterate the point that structural funds have obviously been able to be linked into research and innovation. At the moment, we are not entirely clear what is going to happen there. I come back to the "R&D Roadmap". Since the UK Government have put so much store in the place agenda, about ensuring that research and innovation are supporting economic development and places, it would be absolutely natural for the UK Government to ensure that this shared prosperity fund is able to operate in that way. It may be that we are simply waiting for the detail, but of course, until we get that detail, we cannot really be sure, so it is important that we keep on asking questions and asking the Government for clarity about those points.

Q161 **Wendy Chamberlain:** In terms of that place approach, would that be a priority for you in relation to funding that becomes available?

***Professor Bedford:*** Absolutely. The key agenda here is that research is obviously important for its own sake. It is important for developing the talent of the future, but it is also important because of the effects that it can have on our local and regional economies. For example, my own university is leading the National Manufacturing Institute Scotland, and we have established the Medicines Manufacturing Innovation Centre around the advanced manufacturing innovation district near Glasgow airport.

Those are the kinds of things that we need to be able to support to get new skilled jobs, which will put money back into the local economies. That is the kind of thing you can support with UK Government funding with a good structural fund substitute. They are able to look from a UK-wide, a regional and a city perspective to see what the priorities are and how that funding is best used to stimulate those local jobs.

Q162 **Wendy Chamberlain:** That does sound like a priority. Ms Sandison, what are your thoughts on this issue?

***Rachel Sandison:*** I have very little to add. I would just say that the loss of structural funds will impact the higher education sector in Scotland in different ways. For instance, I know that UHI have accessed, and have

benefited significantly from, EU structural funds in the past and it is a continuing priority for them, going forward.

In terms of the shared prosperity fund, it was documented in the Spending Review that further details on this would be made available in the spring, but, to Tim's point, there is still a lack of clarity and detail on what this would look like, so I have nothing further to add at this moment.

Q163 **Wendy Chamberlain:** Just on that shared prosperity fund, you were talking about a lack of clarity, Ms Sandison. What engagement have you had with the UK Government about its accessibility for Scottish universities, or are you expecting a university-specific funding package? Is that looking more likely?

***Rachel Sandison:*** This is not something that I have been engaged in directly for the University of Glasgow. I am happy to follow up with colleagues on what our direct engagement has been specifically around the shared prosperity fund. We have already discussed the fact that, across the board—particularly when it comes to Horizon Europe, an ERC-style replacement scheme and a successor to Erasmus+ in terms of a national framework—we have been engaging significantly with the UK and Scottish Governments, mostly through Universities UK International, in fact, and its engagement through the Department for Education and BEIS. In terms of the shared prosperity fund, I will hand over to colleagues who may be better placed to respond to that question.

Q164 **Wendy Chamberlain:** I will put it to Professor Seaton. Alastair Sim, from Universities Scotland, told the Committee in October that he felt there may be a gap because they were hoping there was going to be a substantive devolved element to any UK shared prosperity fund. Is that your experience?

***Professor Seaton:*** Yes. There is certainly a potential dislocation between the way these programmes run at an EU level, where there is a substantial devolved element in the way the programmes are run, whereas there is not intended to be for the shared prosperity fund at the UK level. That is quite a political hot potato. I don't think I have a view to express on the ins and outs of that.

What it does is create a greater sense of difference. Without making a political judgment about what the pros and cons are, again there is a connection with other kinds of schemes. The bigger the differences are between what might substitute for the existing EU programme, the greater the challenges are in developing it, communicating it, and for various actors—including universities—to engage with it. Certainly the design of it is going to be absolutely critical.

In a slightly different context—as both Tim and Rachel have said—in quite a lot of these areas, perhaps understandably, there is a gap. There are things we don't know yet. Things that have not been worked out yet, as to how they will be implemented, and it is difficult to have complete confidence when we do not know the details. There is doubt about the

terms of our future relationship with the EU and there is doubt at the level of the contingency plans. The shared prosperity fund is not a contingency. That will definitely be needed, but both the replacement mechanisms that we know we will need, and the mechanisms that we do not know for sure whether we will need—such as a replacement for Erasmus+—in some areas these details have not been worked out yet.

Q165 **Wendy Chamberlain:** Yes, absolutely. It is not just a case of money landing in the account. There are obviously all the bidding processes, and so on; all those kinds of things to go through as well. Before I hand back to the Chair, Professor Bedford, any final thoughts?

***Professor Bedford:*** Maybe I should say that the universities in Glasgow, together with the city council, recently signed a letter from UK Core Cities. That letter was to the UK Government and asked that the cities have a role in distributing the funding and establishing the priorities. It is really important, when you are looking at the city strategy and planning, that the city authorities and the regional authorities are able to influence that and that it is not just determined by Government policy in London. We hope that, whatever happens, there will at least be some level of local control and local influence.

Q166 **Jon Cruddas:** First, apologies for the discourtesy of turning up a bit late. I was stuck on another Committee.

I want to raise a couple of questions about EU students and EU fees. When I joined the meeting, I think Ms Sandison was saying that she anticipated an 80% drop in EU students in the coming few years. Is that right? Hopefully I did not miss this, but could you talk about the consequences of that for teaching and research, both in terms of the drop in student numbers but also the effect of the student fees that would not come in?

***Rachel Sandison:*** At this moment in time, at the University of Glasgow we have taken quite a pessimistic approach to forecasting future EU student numbers. We have been the beneficiary of a very large, engaged, talented EU student community over the last few years. We have over 3,000 European students currently studying at the University of Glasgow.

It goes without saying that the change in the fee regime—European students being charged international fees, but also having to go through the additional barriers of the immigration process, which they have never had to do before—will be detrimental to our ability to attract EU talent into the Scottish higher education sector. We are anticipating that there will be a bit of a cliff-edge drop, which as a sector we will hopefully recover from because we will be very proactive in terms of profiling and engaging in Europe.

Also, right now we are working with the Scottish Government, through Universities Scotland, to try to get agreement for a new European scholarship scheme. That is likely to come under the auspices of the Saltire scholarship scheme, which is currently accessible to a number of key countries worldwide. It provides £8,000 towards tuition fees and a

scholarship for students coming on a very focused, targeted priority range of programmes, and these tend to be around health, technology, science, creative industries.

We are looking at it and hope to broaden the Saltire scheme to include European students, but also to include undergraduate scholarships as well as postgraduate scholarships. However, we know these things take time to implement, take time to build profile for, and we expect a significant drop in numbers to begin with. We will then hopefully rebuild that European student pipeline over the next few years.

In terms of impact, as has already been stated a number of times during today's session, this is not just about the economics. In fact, it is really not about the economics. This is about the loss of European talent. It is about the loss of a multicultural experience on our campuses. While we have grown international student numbers significantly over the last few years—in fact by 25% in Scotland—we will definitely feel the loss of our European student community, should the worst-case scenario come into play.

That will particularly affect some of our subject areas where currently we see a very high propensity for EU students applying for and taking subjects within the sector right now, and they tend to be around physical sciences, computing sciences, subject areas that are unfortunately less attractive to our own local communities. There is work that we need to do on that with schools, but right now we have been able to draw incredibly high-quality European students into those subjects, which has also safeguarded the viability of those subjects within our institutions, so there is a little bit of a risk around that with the loss of EU students.

Q167 **Jon Cruddas:** Listening this afternoon, you have all been in remarkable agreement about anticipating some of the consequences. Professor Seaton, do you agree that we might be foreseeing an 80% cliff edge?

***Professor Seaton:*** I would agree. I suspect that probably all Scottish universities—we have not compared notes—feel it is going to be very similar to that. I would say it is realistic. At the moment, EU students at Scottish universities do not pay fees, as we know, and they would have to pay. We cannot really look at what has happened in the past in England for comparison because, although EU students pay in England, they have access to the loan facility, so they do not pay upfront. Therefore, it will be so different that it is quite hard to make that kind of comparison.

Certainly something like an 80% drop is what we expect. I am sure that, like every other university, we are going to be ramping up our activities to recruit EU students, who will come as international students. That is very important for the culture as well as for the financial reasons that have been given. Perhaps we all, when we came to this meeting—of course, we did not co-ordinate—were determined to emphasise the value of interactions culturally, in terms of the shared experience of all our students.

Just to make a bit of a diversion towards the money, money is not the only thing but money here is important, and this is a point at which the Scottish Government's approach to university funding interacts with the consequence of Brexit. We have been told—and it is very welcome—that the money that will not be needed to pay for the education of EU students in the next academic year will stay within the system. That is a very good outcome from our point of view.

Nevertheless, about 10% of the students across Scotland who are home at the moment are coming from EU member states. My university is very typical; it is about 10% in our case. Therefore, the question remains: will that money remain in the system in the long run? It is a question for the Scottish Government, not the UK Government of course.

If it does remain in the system, to what extent would it be funding additional places, and to what extent would it be used to accommodate the real-terms reduction in funding for students that we have had over recent years? Of course we are interested in both of those, but there is a question about whether that money will remain within the system, so it is really not about money but on the other hand, in certain respects, it is.

In the university system, where there is evidence that there are financial challenges, reflecting in part the fact that Government funding has reduced in real terms over the years, it is a really important question for us. I would not want that to detract from the international character of our discussion, but this is one area where the financial aspect really does matter.

Q168 **Jon Cruddas:** Professor Bedford, would you agree? We are talking about 21,000 to 22,000 EU students across the sector at present. Would you foresee an 80% drop? Again, you have all mentioned the cultural effects, but what are the effects in terms of teaching and research capacity in the system?

***Professor Bedford:*** It is more difficult for me to say because I focus on the research side, so I am not completely sure what the predictions are for undergraduate teaching, but maybe I could make a point about the postgraduate researchers.

Once again, as we said before, postgraduate research, the PhD population, is a really important segment of the student population because they are so close to being staff; essentially, they are apprentice researchers in that position. They go into work at universities. They go into high-value, knowledge-based companies, into advisory positions. These are very sophisticated, talented people. You will have seen this for yourselves, employed within the Scottish Government, the UK Government and so on, there are lots of EU nationals who have gone in there and are working very well.

We are trying to work to develop more scholarship-type schemes whereby we can offer opportunities for excellent students with our eye on the EU—one particular issue is that we cannot, and should not,

discriminate against people from whichever part of the world they come, so that is an important point to remember—but to have more scholarship schemes that are specifically reducing the costs and creating more benefits to attract those excellent students. They are great because there are countries with fabulous education systems and we want to continue to benefit from them.

Q169 **Jon Cruddas:** One final question. You have all talked about what your own organisations are doing in terms of recruitment, but the dramatic effects in terms of numbers begs the obvious question about what the UK Government could do to ensure that Scottish universities remain a popular destination for EU students. Does anyone want to comment on what that might entail or what would be useful to complement what your own organisations are doing?

***Rachel Sandison:*** As you can imagine, Brexit and the pandemic are the only things that, sector-wide, we seem to be talking about right now, and have spoken about now for some time. We are engaging a lot with Universities UK International, in addition to Universities Scotland, on thinking through the opportunities of sector-wide campaigns to ensure that the UK is still seen as a destination of choice for European students.

We are looking at pump priming fairly large, above-the-line media campaigns to support that kind of pipeline of EU students thinking through the opportunities of coming to the UK, and coming to Scotland specifically. We are also doing that at a national level within Scotland, through Universities Scotland and Brand Scotland. We are engaging in campaigns in Europe. They will take the form of above-the-line campaigns but also in-country recruitment, where we are going in with a Brand Scotland and a study-in-Scotland message.

This is an area where we can collaborate really effectively and efficiently. As Tim has already said, Europe is our neighbour. It is much easier for us to go and engage physically, hopefully post-pandemic, in Europe than it is currently for us to do some of the work that we are doing in China, Africa or the US. There will be a concerted programme of activities where we are taking Scottish higher education into Europe, particularly in some of the mainland Europe countries, where we know there is a propensity to pay for higher education, so in France, Germany, Spain and Italy, where we know those students are currently studying in England and paying tuition fees. We hope they will still be attracted by a very specific Scotland offering when they have to pay international tuition fees.

Another thing that would be helpful is making sure that the immigration procedures are as streamlined and as simple as possible. We have done a lot of lobbying around that already. Then there is thinking through both a UK-wide and a Scotland-wide scholarship scheme as well so that we are going out with a message of: we desperately want your talent in our institutions, and this is what we are willing to put forward to ensure that we can facilitate that. We are definitely talking to Universities UK International, Universities Scotland and the Scottish Government about what potential scholarship schemes for EU students may look like.

Q170 **Jon Cruddas:** That was a great, extensive answer. Professor Bedford and Professor Seaton, is there anything to add to that?

***Professor Seaton:*** No, that was a very complete answer.

Q171 **Sally-Ann Hart:** Good afternoon to our panel. I have a few questions about the research collaborations in our amazing international Scottish universities.

Looking at the universities in Scotland that have experienced a high degree of internationalisation, including international research collaboration—Professor Bedford mentioned the Fraunhofer institute, and I know we have the £100 million innovative medicines programme and all that sort of thing—what are the opportunities and challenges to expanding these partnerships in the current circumstances?

At the moment we have Covid, and I know that is difficult, because I know some of the universities down here—Sussex for example—have been worried about the international students. I know that you have a lot of international students, and you also have a proportion of EU students. Well, I suppose, moving forward, we will perhaps not call them EU students. They are probably going to be international students or European students. The pull, clearly, is still geographic for EU students, but you are still attracting far-flung international students, so my question—probably to Professor Bedford first—is what are the opportunities and challenges? That was longwinded, wasn't it?

***Professor Bedford:*** A broad question, yes. The fact is that our economies and our societies have been interwoven for decades. As we have explained, the research systems have been very closely linked and the UK has had the benefit of having what is probably—well, what is—the best research system in Europe, so we will remain an attractive country for collaboration.

If we start to think about, let's say, the innovation side. I think that is quite interesting, because the UK Government has finally with its "R&D Roadmap" set out a very clear vision, which the sector is very pleased about, for how research and innovation interact and how we can create benefits for society and the economy.

There is both an opportunity and a risk here, because so many of the companies that we work with are themselves international. They are based in more than one country and they have choices about where they can place their investments. As a country, we have to make sure that we are an attractive location for them to invest. If we do that, there is an opportunity for us to work on the basis of the excellent research and excellent talent that we have available, and also our ability to work collaboratively on research and innovation.

The risk is that there may be some companies—if we take the German system, for example, also a very sophisticated system—like Siemens, or the many other German companies, that are here as well as in Germany. We want them to continue to recognise that there is a huge benefit in being here and continuing to invest here. That is by no means impossible

to do. The fact is that we have managed, through close collaboration between the universities, Governments and others—lots of funding organisations—to do this in other cases.

In our case, for example, there was recently a big investment by Boeing in Scotland, which was based on its longstanding collaboration with Strathclyde at the Advanced Forming Research Centre. Getting Boeing to make an investment of £11 million at this time is a challenging thing, but they have done it because they see the benefits of what they can get from working with us.

We need to make sure that we do not lose that with the European-based multinationals that we have been working with so much over the years. We have the opportunity to do that, but it will be a bit more challenging because, as we said before, the European system has been evolving over the years. Alongside the research pillars of the European Horizon programme, you also have an innovation pillar. One of the possible scenarios is that we might be allowed to associate to one pillar, the research pillar, but not to the innovation pillar. That is a potential outcome of the negotiations.

That would not be so good for us, because companies that have been working within that innovation pillar and getting European funding for their research and innovation might find it more difficult to cross over to the UK system. Again, that is an argument for us to be as completely associated to the European programmes as we possibly can be. I think, with agility and funding, we can create an attractive system here because of the excellence we have in research and our ability to translate those research outcomes into things that are of tangible benefit for knowledge-based companies.

**Chair:** I am trying to make sure we get you guys away by 3.30.

Q172 **Sally-Ann Hart:** Professor Seaton, do you have anything to add?

***Professor Seaton:*** Very much in the same line of thinking. We are confronting a disruptive series of events with Brexit, but it is important not to lose sight of the real excellence that we have in research, knowledge exchange and innovation within British universities, and within Scottish universities in particular.

We are one of the leading universities in research and innovation in the UK. The evidence suggests that, per £1 spent, we are the leading country for generating research outputs and outputs useful to industry from the work of the universities. If that is to continue, we have to get the international relationships right. It also depends on having a good university system in general, having good infrastructure, both physical and digital. We know that all the Governments involved recognise that.

It also relates to the workforce. This is the point at which undergraduate education, postgraduate education and research are interlinked. Companies will come to the UK, partly because of the research outputs, but you can get the research outputs in different places, you can buy the

research outputs—it is not as simple as that, but you can—but what they are really interested in is the talent, being able to come to a place where there are universities nearby.

To give a little example, the strengths of my own city with its two universities are primarily in biotechnology, computer games and digital media. I won't go into the details. Every other city in Scotland has its own examples. If we can attend to the quality of the education, as we are, up to postgraduate and then post-doctoral level, keep on investing in the infrastructure, we will be an attractive country. I don't want to minimise the impact of Brexit, but that is a very strong foundation that gives us an opportunity into the future.

Q173 **Sally-Ann Hart:** It is that established reputation, anyway. Just staying with you for a moment, Professor Seaton, would you expect the UK and Scottish Governments to support the university sector in identifying collaboration opportunities? Or is that something the universities do themselves? Is it with the help of the Government?

***Professor Seaton:*** It is very varied. Government agencies play a critical role in supporting this, and it very much depends on the scale. One example from our own experience: we have a programme called InGAME, funded primarily by the UK Government through the Industrial Strategy Challenge Fund but also with funding from the Scottish Funding Council. That is a collaboration primarily between Abertay University—we are leading it—the University of Dundee and the University of St Andrews. We could not have done that without a Government initiative.

It is not that we needed the initiative to find partners, but the kind of financial firepower that comes into it is really only wielded by Governments. In this case, it was an investment of £11.5 million. We cannot provide that from our own resources and we cannot readily negotiate it directly from companies. Although we are negotiating with companies and we have great support from companies, that kind of money is very hard to get from companies initially but, once you get the programmes going, companies do contribute and Tim gave examples from his university. To get it over the edge to where companies are likely to invest substantially, there is a vital role for the state.

Q174 **Sally-Ann Hart:** Would you expect that to continue, and will you look to how the state can support you more?

***Professor Seaton:*** Yes. Indeed, staring at the dim outline of Brexit, as we don't quite know how things are going to turn out, it is generally understood by the Governments that more of that kind of thinking is required, because the all-encompassing framework—we hope to engage with as much as we can, for example, through Horizon Europe, which has come up in conversation several times—will not be quite the same as it is now. At best, it will not be quite as good as it is now, so there will be much more need for the UK Government and the other Governments within the UK to engage with that.

Q175 **Sally-Ann Hart:** Ms Sandison, you are nodding. Is there anything you

would like to add on that question about collaboration opportunities?

***Rachel Sandison:*** No. Other than to say that Scottish international research is a powerful tool for international collaboration and connections, and 57% of publications currently involve international collaboration. Ensuring that the framework exists to allow that success to continue is going to be absolutely mission critical.

Q176 **Sally-Ann Hart:** I have a question about the Scottish universities' financial dependence on overseas students' fees, international students, and how it might affect research programmes in the future. I will go to Professor Bedford first. Do you think there are risks for Scottish universities of being too dependent on overseas students' fees?

***Professor Bedford:*** There is clearly a risk for everybody in terms of dependency. It is built into the system. As we are all aware, it costs us more to put on our undergraduate programmes than we make. For research also, the standard practice is that we get 80% of full economic costs on UKRI-funded research. If you do charity-funded research, you usually receive less of the total economic cost that you need to carry out the research.

All universities are confronted by the fact that, in effect, we have to cross-subsidise research activity with income from other activities. There is a small amount to be done, in terms of conferencing and those sorts of things, but you realise that is relatively small beer compared with the costs of running large research programmes, so, yes, there is a real challenge there.

At a UK level, I have been involved in a few discussions with UKRI, Research England and the Scottish Funding Council where this kind of issue has been raised. It has been brought into particular focus around the Covid issue, where there has been quite a lot of discussion around whether that 80% should increase. I think most universities would certainly say that it should increase beyond 80%, because it is so difficult to fill the other part of that.

I do not think any of us would be particularly comfortable if it were to be 100%, full economic costs, because that would effectively make us consulting organisations for the Government. I think the academic freedom, the freedom of the universities to decide their research agendas and to follow those agendas, is a great strength, not only for the universities but for the UK as a whole.

***Professor Seaton:*** It is great to be able to cross-subsidise research and the teaching of Scottish students from international student fees. While it continues it is great. Of course, it will continue to some extent but it is a point of risk. The current pandemic has demonstrated that. Of course, this is an unusual situation, but these are interesting and open questions as to what the appetite will be to travel across the world for international education in the post-pandemic world.

I do not have a particular view on it, but I don't think we should assume that we will continue the kind of growth that we saw immediately before the pandemic. We might; we might not. There is a risk there. Looking at it from the point of view of using public funds, it is a great outcome for the public funding of the education of Scottish students because the value that is delivered by the universities is less than the cost. That was very clear in the recent Audit Scotland report, which you will have seen. It is good news for the public purse, arguably good news for the taxpayer, but it is a point of risk and instability. We have been arguing across the Scottish universities, and particularly within Universities Scotland, for that to be addressed. It is a great outcome in terms of the use of public funds, but there is an element of risk.

**Chair:** That concludes our questions for today. Can I thank all three of you? That was a fantastic session and I think we have learned an awful lot about our European reach, exactly what needs to be done and what is required.

If there is anything you feel would assist us further in this inquiry, please send it through. I do not think there is anything outstanding, but I am sure the Clerks were listening and will get in touch with one or all of you about that. For today, thank you for attending the Scottish Affairs Committee.