

Economy, Jobs and Fair Work Committee

Tuesday 13 March 2018



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ECONOMY, JOBS AND FAIR WORK COMMITTEE 9th Meeting 2018, Session 5

CONVENER

*Gordon Lindhurst (Lothian) (Con)

DEPUTY CONVENER

*John Mason (Glasgow Shettleston) (SNP)

COMMITTEE MEMBERS

*Tom Arthur (Renfrewshire South) (SNP)

Jackie Baillie (Dumbarton) (Lab)

*Colin Beattie (Midlothian North and Musselburgh) (SNP)

*Kezia Dugdale (Lothian) (Lab)

*Jamie Halcro Johnston (Highlands and Islands) (Con)

*Dean Lockhart (Mid Scotland and Fife) (Con)

*Gordon MacDonald (Edinburgh Pentlands) (SNP)

*Gillian Martin (Aberdeenshire East) (SNP)

*Andy Wightman (Lothian) (Green)

THE FOLLOWING ALSO PARTICIPATED:

Sir Harry Burns (Council of Economic Advisers)
Professor Sara Carter (Council of Economic Advisers)
Laurie Macfarlane (UCL Institute for Innovation and Public Purpose)
Professor Sir Anton Muscatelli (Council of Economic Advisers)
David Ovens (Archangels)
Peter Reekie (Scottish Futures Trust)
Kerry Sharp (Scottish Investment Bank)

CLERK TO THE COMMITTEE

Alison Walker

LOCATION

The David Livingstone Room (CR6)

^{*}attended

Scottish Parliament

Economy, Jobs and Fair Work Committee

Tuesday 13 March 2018

[The Convener opened the meeting at 09:30]

Decision on Taking Business in Private

The Convener (Gordon Lindhurst): Good morning and welcome to the ninth meeting in 2018 of the Economy, Jobs and Fair Work Committee. I remind everyone in the public gallery to turn off any electrical devices that can interfere with the sound system. We have received apologies from committee member Jackie Baillie.

Agenda item 1 is a decision on taking items 3 and 4 in private. Do we agree to do that?

Members indicated agreement.

Scotland's Economic Performance

09:31

The Convener: We turn to our inquiry into Scotland's economic performance. We have three witnesses this morning, one of whom is delayed slightly in traffic, although I understand he will be with us shortly. At this point we have Sir Harry Burns and Professor Sara Carter. Welcome to both of you. As I say, we will be joined shortly by Professor Sir Anton Muscatelli.

I will start by asking for an update on the recent activity of the Council of Economic Advisers. Perhaps one of you would like to make a short statement on that.

Professor Sara Carter (Council of Economic Advisers): The Council of Economic Advisers has met regularly since 2016 in its present incarnation, and the focus has been very much on Scotland's economic strategy. In particular, we have focused on inclusive growth and, most recently, on the establishment of the national investment bank. We have also focused on Scotland's economic performance since the financial crisis of 2008-09 and on the policy responses that were appropriate and could be considered following the crisis, and we have looked at future risks to the economy—in particular, over the next 10 years and specifically the impacts of Brexit.

The Convener: Thank you very much. You mention the national investment bank. It was first proposed in 2009 in a particular format. That was slightly altered and then abandoned—I am not sure whether "abandoned" is the correct word—in about 2016. We now have a new model for a Scottish national investment bank, which was proposed in 2017. What confidence can we have in the new proposal and that it will be progressed?

Professor Carter: The Council of Economic Advisers specifically discussed the idea of a national investment bank, and one of our colleagues, Mariana Mazzucato, is a strong proponent of it. In fact, her views are, I believe, shared by all members of the Council of Economic Advisers.

We focused on the national investment bank specifically in our response to the green paper on the United Kingdom's industrial strategy, in which we focused specifically on the benefits to Scotland of setting up a national investment bank. That process of making a response to the UK green paper really helped to corral and shape a shared vision across the council of what the national investment bank would be.

Three aspects of the current proposal give me particular comfort. The first is the fact that the national investment bank must be strategic in its investments. It must also be mission oriented in its investments, and it must provide patient capital. Those three dynamics of the national investment bank make it a very welcome new addition to Scotland's economic agencies and economic levers.

The Convener: Thank you. Does Sir Harry Burns want to add anything to that?

Sir Harry Burns (Council of Economic Advisers): No, not particularly. As a humble medic, I bow to the expertise of the economists on the Council of Economic Advisers. My interest has been pretty much in the inclusive growth agenda, the whole impact of inequalities on the potential for economic growth and the impact of the economy on inequalities. There is a circular argument there, so I bow to Sara Carter's expertise in the area.

The Convener: That is fair enough.

Gordon MacDonald (Edinburgh Pentlands) (SNP): I have a general question to start with. How do you see the Scottish economy as having performed over the past 10 years?

Professor Carter: Over the past 10 years, everything that we see has been shaped by the financial crisis of 2008-09. If you look at the 10 years prior to 2008, you will see pretty strong growth. Nevertheless, everything over the past 10 years has been shaped by the impact of the financial crisis and the policy responses that we, as a nation, were able to make. Some of the policy responses to the crisis-for example. infrastructure investment and, in the labour market, the growth in apprenticeships—have been welcomed, as, in family policy, has childcare policy.

Over the past 10 years, we have seen an economy in which the labour market has been resilient in terms of there having been high levels of employment and low levels of unemployment, but we are still suffering from a lack of productivity and we need to focus more on exports. As part of that, we rely overly on a small number of firms for productivity and export performance. Therefore, as an entrepreneurship professor—that is my subject-I would like to see much broader growth of small firms. I am talking not about the frontier firms but about quadrant 2 and 3 firms. We must get those currently small firms to a state in which they can contribute more to productivity and exporting in the overall economy.

We are seeing strengths, but everything that has happened over the past 10 years has been shaped by the financial crisis—and, of course, we now have Brexit. **Gordon MacDonald:** You said that there is an overreliance on a small number of companies. Looking at the business base in Scotland, I believe that only around 0.5 per cent of companies have more than 250 employees.

Professor Carter: Yes

Gordon MacDonald: Part of the problem that we face is a lack of Scotland-based headquarters. Most companies in Scotland have very few employees. Is the difficulty in the fact that we saw wholesale takeovers in the 1970s and 1980s and we do not have the business base that we once had?

Professor Carter: Yes. There are two different responses to that. The vast majority of Scotland's enterprises are small: 70 per cent are self-employed and another 28 per cent are in the small category—they have between one and 49 employees, and most of them have fewer than five employees. In that respect, the Scottish economy is no different from almost any other developed economy around the world in which there is a huge reliance on, and a huge participation in, small to medium-sized enterprises. How we encourage and support those SMEs is an issue to discuss.

There is an issue with regard to Scottish headquarters, as we have a very small number of large companies. Perhaps of more concern is the fact that there are a small number of medium-sized companies. That missing middle should be of more concern.

The inclusive growth agenda is very much about a bottom-up approach. Therefore, I would argue that, although we can mourn and lament the lack of large companies, it is also incumbent on us to start addressing how we grow and support our large number of small companies—how we encourage them to be more ambitious and support their ambitions. That is a tougher thing to do, but the prize might be bigger.

Gordon MacDonald: You say that everything has to be viewed through the 2008 financial crisis, but have we seen any improvement in, say, gross domestic product growth, productivity or exports? Has there been improvement during this very difficult period?

Professor Carter: Yes, I believe that the data shows modest improvement, and we have certainly seen a resilient labour market. As I said, we have almost near record levels of employment and very low levels of unemployment. Nevertheless, we must start thinking about underemployment within the labour market. A large number of women, for example, are still employed on part-time contracts.

There are definitely signs of progress. We are seeing companies export, and we are seeing tentative increases in productivity, so there are signs of recovery for sure, but it has to be nurtured.

Gordon MacDonald: I have a final question, on inclusive growth. In measuring the performance of the economy, are we measuring the right things?

Professor Carter: I will pass that question over to my colleague.

Sir Harry Burns: I do not think so. In measuring the growth of the economy, GDP is the only game in town although GDP measures only what we produce and what we consume. We have huge inequalities in health and wellbeing, in educational attainment and so on, and GDP does not take any of those inequalities into account. It does not take into account the impact of production on the environment or anything like that. There are a number of alternatives to GDP out there that do take those factors into account.

My feeling is that it will be only when we take into account educational failure, health failure and so on that we will get a real understanding of the opportunities to improve productivity. In the meantime—since the Bretton Woods system of the 1940s—GDP has been the Holy Grail; yet, increasingly, it is just not doing it.

There is some really interesting data emerging from the United States. Everyone will have heard of the Glasgow effect, I suppose, which is the increase in mortality due to drugs, alcohol, suicide and violence in younger working-age men in Glasgow since the 1970s. Angus Deaton, the Nobel prize-winning economist in the States, has recently published a similar analysis, which shows that, since 2000, among white men in their 50s in the United States there has been a 250 per cent increase in the death rate from drugs, alcohol and suicide. He has produced some elegant maps that show that the counties in which there was the highest support for President Trump in the election are the counties that have high mortality rates, and he is describing those as deaths of despair. When people do not feel secure in their income and so on, that is what happens. That is what has happened in west central Scotland and, to a certain extent, in Dundee since the 1950s and

We need to start producing incentives in the economy to tackle that inequality. Inclusive growth is a long way off the pace at the moment, using conventional metrics.

The Convener: Gillian Martin has a quick follow-up question.

Gillian Martin (Aberdeenshire East) (SNP): I am interested in what you are saying about

inclusive growth—in particular, the example you have given of men's health. We recently introduced minimum unit pricing of alcohol. Do you see initiatives such as that, which might look like an economic policy, having an impact on inequality?

09:45

Sir Harry Burns: Yes. The evidence is that minimum pricing will help, but it is a tiny part of that. It is a very complex system, with associations all over the place, and we are not sure whether such things are causally associated.

The answer, in moving a complex system forward, is to do lots of things, see what works and scale those things up. In that way, the whole system begins to move. We might never be able to attribute benefit to one particular action that we have taken but, if we are not measuring the right things to begin with, we will never know whether we are moving in the right direction.

Being able to measure educational failure, crime offending behaviour and so on will tell us whether our society is becoming more cohesive—and at the heart of a lot of the despair is a breakdown in social cohesion. Things that we might do to support people who currently feel despairing—to address their insecurity, the threat that they might feel, the homelessness and so on—will have an impact on our productivity. I am absolutely sure of that

The Convener: I welcome Professor Muscatelli, who has just joined us.

Tom Arthur (Renfrewshire South) (SNP): I have a quick follow-up question. Sir Harry, you spoke about men in their 50s and 60s. I wonder what your views are on the impact of insecure and vicarious work on people in their 20s and 30s. How does that correlate with health or educational inequalities? For example, when a child is raised in a home in which both parents are, or one parent is, in insecure work, how does that impact?

How are we going to shift to a more holistic understanding? Beyond that, how should politicians discuss the broader aspects that impinge on issues such as growth? Should we be thinking about growth itself, or is that measurement redundant?

Sir Harry Burns: I do not think that growth is redundant as long as it is the right type of growth.

We are currently seeing wide inequality across Scottish society among people in their 20s, with higher mortality rates in the 40s and 50s. Twenty years ago, that inequality was manifested in the 20s and 30s. We have seen the cohort of young people born from the 1960s on moving through the

population with that wide inequality and, yes, it has an impact.

There is now huge interest in adverse childhood experiences. In families in which there is poverty or insecurity, there are high levels of domestic violence. A long-running study in the United States shows that the single biggest determinant of educational failure is witnessing domestic violence in the home. That kind of chaos, which occurs as a result of poverty and insecurity, is running its way through the whole of society, and I believe that we are seeing an intergenerational cycle. Those young people grew up and are now having children. Those children are being born into homes in which their parents do not know how to be parents and they, in turn, will produce the next generation with wide inequality.

The problem with GDP is that, in essence, it measures the consumption and production of money; it does not measure the impact of production on air quality, on a range of environmental factors or on our use of natural resources. It does not take inequality into account. Alternatives have been developed that are based on sustainable goals that have been enunciated by the World Health Organization—the sustainable development goals—which would allow us to monitor how we are doing.

At the moment, there is a belief among many economists who are talking about the issue that it is in the interests of big business to continue using GDP as a measure. They can predict what will happen to the stock market on the basis of GDP figures, and they are very comfortable with that. So, there is a vested interest in keeping GDP. However, if we are genuinely going to aim for a safer society in which everyone has an equal opportunity to attain their full potential in life, we must grasp some of those other measures.

Tom Arthur: Is there a specific danger for people in their 20s and 30s with regard to the decrease in social mobility? I am thinking about my parents' generation; my father was born in a single end and my mother was born in a prefab in Barrhead in the early 1950s, and they were able to go on to successful careers in the national health service and give my siblings and me a far better quality of life than they ever had. However, for people of my generation, all they can look forward to is the sting of a real-terms reduction in spending power and quality of life. What impact is that having on the psychological and mental wellbeing of people in their 20s and 30s?

Sir Harry Burns: Actually, I know the prefabs in Barrhead. I was brought up quite close to them.

I am not sure that social mobility is as constrained as you suggest it is—I have seen no figures that show that. The point is to nurture

young people appropriately and give them support, and in that respect, I would highlight mentoring programmes such as MCR Pathways, which is very active in a number of schools across Scotland. I recently bumped into a former medical colleague who is acting as a mentor in that programme, and he was cock-a-hoop because a young boy from Possilpark whom he had been mentoring—and whose family were so poor that he had to walk 45 minutes to and from school each day—had just got into medical school. Folk in Bearsden, Lenzie and so on struggle to do that, and it shows that it is possible to support young people to be socially mobile. We should build on those kinds of capacities.

However, there is no doubt that the more we support families in poverty, who feel insecure in their housing and in their futures, the more they and their children are going to get positive outcomes. The less domestic violence there is, for example, the more likely it is that you will have positive outcomes. I really believe that if we put in place a set of measures of economic progress that includes measures of inclusiveness and hold ourselves to account on them, it will produce a step change in outcomes for the economy.

John Mason (Glasgow Shettleston) (SNP): I am interested in how the council relates to the Government, and I wonder whether we can look at examples of such interaction. First, do you come up with new ideas and bounce them off the Government, or does the Government bounce new ideas off you—or is that not really how it works?

Sir Harry Burns: It is a bit of both.

Professor Carter: If we all answered that question, we would probably say the same thing: it is a little bit of both. We have very open discussions. Perhaps Anton Muscatelli would like to respond here.

Professor Sir Anton Muscatelli (Council of Economic Advisers): Yes, it is a bit of both. Let me give you a couple of examples. As you know, the Government consulted us on the issue of raising tax bands and tax rates at the higher end. A lot of that work was done by the office of the chief economic adviser but, as is minuted in our deliberations, we also provided advice on the matter.

The council has had workstreams at a very informal level in which issues such as inclusive growth and how to encourage innovation and entrepreneurship, which Sara Carter has led on, have been discussed, and we have had some input into the office of the chief economic adviser. That has then come to the fore through papers at meetings of the council. Those are two examples, one of which is more about work that we have led

and the other is about, as with the issue of tax bands, our being asked, "Here is an issue. What do you think about it?"

John Mason: That was very helpful.

Have any comments or recommendations that the council has made or the work that it has done impacted on Government policy and thinking on, say, innovation?

Professor Carter: I think so. One of the issues that I am particularly concerned about and which has been discussed by the Council of Economic Advisers is the relatively low level of business investment, particularly in research and development. That issue impacts negatively on the economy.

With regard to innovation, the Scottish economy has some very important strengths, particularly in our research-intensive universities and the innovation taking place in higher education. I am thinking of, for example, the relationship between Government and universities through innovation and catapult centres. The national manufacturing institute for Scotland, which was very recently set up in my own university, gives us a great basis for discussing developments in innovation. As for myself, I am very concerned about the lack of business R and D and business innovation, and the council has been discussing how we increase and get more businesses to invest in those things.

John Mason: Have you made specific recommendations to the Government on that point, or are you not quite there yet?

Professor Carter: Our discussions in the Council of Economic Advisers are generally held in the presence of Government ministers. Therefore, it is a more collaborative approach than our simply having a discussion and telling Government what we have discussed. Of course, our minutes are put into the public domain very quickly, too.

John Mason: That was helpful.

Professor Muscatelli: Particularly with regard to industrial strategy and innovation, I note that, when the UK Government published its green paper, we discussed it and its relevance to Scotland, and out of that discussion came a submission to that consultation in which we, in effect, trailed the creation of the Scottish national investment bank. That is exactly the sort of issue that Sara Carter is talking about, and it is essentially about trying to deal with issues of market failure through patient capital and missionoriented investment. Many of the themes raised in that submission to the UK green paper were also echoed in the presentation that came out a week or so ago on the potential for developing the SNIB as an investment bank.

John Mason: One of my colleagues will ask more about the Scottish national investment bank in due course.

Professor Muscatelli, you said that the Government had asked you to comment on the issue of tax bands and rates. Did you have much to say on it, and did the Government take what you had to say on board?

Professor Muscatelli: I think that we did have a lot to say. For example, we had quite a bit of discussion around some of the tax elasticities. A lot of the technical work was done in Government, but the council contains a number of economics experts, and we looked at the extent to which some of these elasticities would be relevant in Scotland. Of course, none of us knows exactly what will happen until we try these things out, as we have no experience in this field. That was the general discussion; it was led by an initial paper from Government officials and then we made our own contribution.

I also believe that we were listened to. Certainly voices around the table were saying, "Well, if you have a large increase, you are likely to see these behavioural changes. These are the sorts of elasticities that we have seen at a UK level and in other countries. If you go for more moderate increases, you are less likely to see behavioural shifts."

John Mason: Finally, I have to say that I do not know how Sir Harry Burns comes into all of this. Does tension ever arise from one side looking for economic growth and the other side looking to share it out a bit more?

Sir Harry Burns: I am not conscious of any such tension. We are all in this together; we all want a flourishing future Scotland, and our discussions are about what flourishing might mean. As far as I am concerned, it means that everyone has an equal chance of attaining their full potential in life. I think that that is agreed. There are certainly no tensions at all between the different interest groups on the council.

Professor Carter: It is important that the Council of Economic Advisers does not view inclusive growth as some kind of trade-off with economic prosperity, and I believe that there is consensus among council members that such growth is very much part and parcel of such prosperity. Our approach to inclusive growth is that economic growth has to include the widest range of people and places; it is about not only economic success but equality of outcome and opportunity, which means increasing the number of people who both contribute to and benefit from economic prosperity. I believe that that view is shared by council members.

10:00

Gordon MacDonald: I have a very quick question on Professor Carter's point that business R and D spend is lower here than in the rest of the UK. Is there any one thing that the Scottish Government is not currently doing but which it could do to change that situation? Moreover—and bearing in mind that the Scottish economy is not exactly a mirror of the UK economy—is there anything that the UK Government could do with R and D tax credits or the corporation tax system to improve the situation?

Professor Carter: A range of things could be done to improve the situation and certainly R and D tax credits have demonstrably been helpful in both the United States and the UK.

With small firms, however, I believe that the problem requires a more hands-on approach. I do not think that such firms respond terribly directly to, say, tax advantages, and we need to work with them more closely—indeed, we almost need to get under the skin of the business—to get people to realise what their growth ambitions could be and what they could achieve.

This has been brought home to me in the past few years. I hope you do not mind it if I mention once again my academic department, the Hunter centre for entrepreneurship, but a few years ago we saw a gap in the support landscape for SMEs. This is all about trying to get businesses to grow; the fact is that we have a proliferation of small firms, but we need scaled-up enterprises. A few years ago, we introduced a growth advantage programme, in which we interview companies—local companies in Glasgow—and they meet one weekend a month over a six-month period. It is very much about peer learning and peer support, but it is facilitated by the university, and we also bring in experts to raise not just the ambition of these firms but their sense of efficacy that they can achieve their ambition. At the end of the six months, we have seen a 10 per cent growth in employment and a 13 per cent growth in sales. Of course, annualised growth over a threeyear period will be much greater than that.

Those kinds of initiatives, in which you are actually working with small firms, are really important not only in changing them but in adding dynamism to the economy. Of course, that requires hands-on work, which makes it a harder ask, but I think that if we work directly with small firms to allow them to scale up, the effects are more profound and the prize is greater.

Gordon MacDonald: Is that not what Scottish Enterprise is doing through its account managed companies?

Professor Carter: Yes, but only 2,000 of the roughly 360,000 enterprises that we have in

Scotland are account managed by Scottish Enterprise. We cannot possibly rely on Scottish Enterprise to do all of this.

Traditionally, an issue with Scottish Enterprise is the thresholds that companies have to reach in order to get on to the account managed programme. We are trying to plug the gap in support between the ordinary, small firms and the firms that have reached those thresholds to get on to Scottish Enterprise's account management programme.

Andy Wightman (Lothian) (Green): I want to pick up a couple of points made by the panel. When the Finance Committee was doing work on preventative spend in 2010, it cited evidence that 40 to 45 per cent of public spending was focused on failure demand. In 1999, 13 per cent of 16 to 34-year-olds were living in private rented accommodation; it is now 41 per cent. The number of folk living in poverty in private rented housing has doubled since 2000 and social housing has halved. To what extent is the council across the fact that, unless people have decent housing and can afford to live at the very basic level, all this talk about economic performance and growth and stuff is really a bit of a distraction?

Sir Harry Burns: I have been particularly concerned about the issue of failure demand, particularly in health care, where people chase targets and so on. The issue of four-hour waits in accident and emergency is one thing, but why are so many people coming into A and E in the first place? Those are the sorts of questions to ask here. To tackle that requires us to stand back and look at the whole system—the system that leads people to fail and to be living in inadequate housing and so on—which is really difficult. People struggle to get their heads round that and we tend to oversimplify it. We say, "Here's a solution to that problem", then we try it and it does not work, because we need to try 10 or 15 different things and do them all consistently.

I have been arguing not just within the council but with other colleagues in the Scottish Government that we need a whole-systems approach to this kind of issue. That means being courageous about what we try, sticking our necks out and getting the public sector to work differently. If you remember, the Christie commission talked very much about prevention, but the Christie commission's recommendations have never really been put into effect because the method for delivering those recommendations is so difficult.

We have been talking about how we start doing that. We start by identifying people living in chaotic circumstances and looking closely at how they might be helped to begin to take control of their lives.

I have been gathering evidence from a range of projects that have been carried out in other places. I will give you one example, if I may. I gave a talk in the United States recently and one of those interventions was being trialled. This American had picked the sort of intervention that I think would be quite important and was doing a randomised control trial of it. He was using a concept from medical trials called number needed to treat. For example, if you want to prevent a heart attack or stroke by giving someone low-dose aspirin, the number of people you need to prevent one adverse outcome-heart attack or stroke-is 1,600. He said that, so far in the course of the study, the number of people living in difficulty that you needed to treat with the intervention to prevent a suicide attempt or an arrest was 10. You begin to think, "It's a bit of a no-brainer. We really need to try this kind of approach."

We are in discussion with Scottish Government colleagues about such approaches. It is about giving people a decent, secure life that gives them a sense of purpose and meaning, allows them to feel in control of their lives and helps them to move on. So, yes, I am right up for that.

Andy Wightman: Have those discussions included the thorny question that you have just put your finger on about how to account for such interventions? We have plenty of debates in this place where we say, for example, "Please don't cut the spending of £100,000 on a yellow bus at the top of Leith Walk that's out there on a Friday and Saturday night, because it's helping folk get home who'd otherwise end up in A and E or prisons and stuff." It seems that it is very difficult to have an accounting system that allows the alleged benefits of interventions like that to be paid for out of savings in other places. The Government has an ambition in this session of Parliament to spend £500 million over the rate of inflation on the health service. We should be aiming to reduce spending on the health service by making sure that people do not end up needing it. We can never abolish it, of course. People will always get sick and stuff. Is any work being done in the council on how you can do that accounting, because that seems fundamental to us in all the subject committees in Parliament?

Professor Muscatelli: One discussion that we have had was about the interconnectedness of different types of spending, for example interventions in the North Ayrshire diagnostic. If we want to understand how inclusive growth can be put into practice, given the fact that different economic interventions impact in different ways, we need to understand all the connections. As Harry Burns said, it is difficult, partly because, as you pointed out in the example, a lot of the spending competencies cut across different local

authorities and therefore there is not a single level of control.

We were exposed to the work that was done internally in the Government, and we contributed to what was a very good discussion, because it began to scope out where we might say to different local authorities, "You need to work together. Here are two or three areas where an element of spend in one area is having an impact on another, and there are no overlapping competencies." That is just one example of studies that can help.

Wearing a different hat, I chair the commission on economic growth, which evaluates the Glasgow city deal. We are beginning to evaluate one of the first projects, which is in Sighthill. It is an infrastructure project, but it has potential multiple impacts on a really deprived area of Glasgow. We are beginning to scope out the possibility of doing a pilot there, to see how the project is impacting on different elements, not just on the infrastructure itself, and the gross value added, but on people's lives and work patterns and so on.

Sir Harry Burns: Can I give you a statistic that might cause some eyebrows to raise? An American study of adverse childhood experiences, which has been running for a long time and has very robust data, has calculated that one year's worth of child neglect—a cohort of children in one year who have been neglected-will, throughout the lifetime of those children, cost the American economy \$124 billion. That is the cost of care, imprisonment—because healthcare. proportion of them will go to jail—and failure to pay taxes because some of those children will never work. Pro rata, that one year's worth of children in Scotland should cost about £1.8 billion. Kids born in the 1960s into chaotic homes will be costing in excess of £1 billion over their lifetime. We are ratcheting up significant costs.

A failure in demand that I was discussing recently was the cost of taking children into care. It can cost £100,000 to £150,000 a year to look after some children with difficult behaviour problems. How much better would it be to give the parents maybe £50,000 as a salary to look after them, help and mentor them so that the child is brought up in a home that can support them? It would save money and we would get a better outcome at the end of the day. There are a number of things that we need to get quite courageous about in order to make a change.

Andy Wightman: I have a brief follow-up to a point that Professor Carter made. You said that small firms do not respond to tax advantages. Has the council looked at the small business bonus scheme, which is costing £250 million a year?

Professor Carter: It was not that small firms do not respond to tax advantages. What I meant to say was that the tax advantages are perhaps less important than direct intervention through, for example, training programmes.

Andy Wightman: I have a few technical questions about the council. You met formally once in 2017 and had four conference calls, and you last met in January this year. I believe that your last report was in 2016. Do you have a report scheduled for 2017-18? Is your programme of meetings ad hoc or do you try to schedule them? Who is in charge of the agenda?

Professor Carter: First of all, we have not brought out a report, but that is because our minutes are now put online, and are in the public domain, very quickly. That probably removes the need for a big fancy report at the end of the year.

We try to schedule two meetings a year. We know which months those will be in, and they are scheduled whenever we can. In addition to our meetings last year—I think that you said that it was one meeting and a number of conference calls—most of the members of the council were strongly involved in the inclusive growth conference that took place in Glasgow in the autumn. That was another opportunity for many of us to meet, present and discuss our work, and hear about the work of other countries in the area of inclusive growth. Although formal meetings are, of course, scheduled and minuted, last year's second meeting was more or less replaced by the inclusive growth conference.

10:15

Andy Wightman: All the members of the council are prominent in their own fields and have lots of useful and interesting things to say, and regularly do say interesting things on their own account. Obviously, the council's job is to advise ministers, but do members ever feel that they need to put something into the public domain to help to inform the public and perhaps provoke debate about a topic that they feel is not getting enough attention, or would that be going beyond your responsibilities and role?

Professor Carter: The role of the Council of Economic Advisers is to advise the First Minister. The issue that you raise about putting our work and thoughts into the public domain is an interesting one. We all do that individually, of course, but, as a council, we interact together quite a bit. Anton Muscatelli and I referred to the council's submission to the UK green paper on industrial strategy, and many of us participated in the conference on inclusive growth.

Professor Muscatelli: That is right. We do not feel that it would be particularly useful for us to

prepare reports that would just sit there as discussion papers. Apart from anything else, it would soak up a huge amount of resource from officials, who would be better placed trying to implement our policy advice than simply giving us space to write up our musings, if you like.

I return to the example of the green paper. We did not go into that session saying that we, as a group, would submit something independently to the green paper. As part of our discussions, it came out that we thought that we should submit something to the consultation, which is what we did. That was a departure, in a sense, because we ended up putting in a submission that was independent of that of the Government.

Dean Lockhart (Mid Scotland and Fife) (Con): I would like the panel's views on the Scottish Government's four Is economic policy. We have touched on inclusive growth; the other elements are increasing investment, internationalisation and innovation. Obviously, they are important outcomes, and I think that everyone agrees with them but, compared with the UK industrial strategy or the economic strategy in countries such as Germany and Singapore, for example, the policy is quite light on detail. Would the economic strategy benefit from having more detail, more definitions and more guidance on how to achieve the four Is outcomes?

Professor Muscatelli: That is a really interesting question. There is no doubt that, in the past couple of years, particularly post the Brexit referendum, a lot of bandwidth has been taken up in trying to understand exactly where we will be and therefore what sort of interventions we would want.

I refer to something that Sara Carter said earlier, which is really important. It was asked whether there is a single intervention that will generate innovation and investment. I am afraid that there is not; if there was, we would have discovered it many years ago. However, a full range of interventions is being put in place, which are absolutely critical. One is the alignment of spend around the skills and enterprise agencies. That is hugely important because, unless the range of interventions from Scottish Enterprise, Skills Development Scotland and the Scottish Further and Higher Education Funding Council around innovation centres are really aligned and there is a single mode of spend rather than the double or triple jeopardy that happens between different agencies, we cannot really make progress in developing new industries. That is what we need at this point in time. We need a range of new industries developing in Scotland to try to boost innovation and growth.

On the other types of interventions, it will be interesting to see how the SNIB develops—I know

we will get on to that. It will have to make decisions on exactly where to put mission-oriented capital and what the priorities are. That will begin to define what sits behind some of the four Is, what sectors we will focus on, and what areas Scotland can genuinely be competitive in on the world stage.

Professor Carter: I have the privilege of sitting on the strategic board, and I know that Nora Senior gave evidence to the committee on the committee's work fairly recently. To reiterate what Anton Muscatelli has just articulated, the strategic board gives us a real opportunity to align the economic agencies behind Scotland's economic strategy. When all those agencies are in the same room with the same priorities and discuss matters together and look for hard alignment—not just the alignment of some back-office functions, but a more systematic alignment throughout their work—that gives us the opportunity to start to focus on real issues. As Anton Muscatelli has said, that is a hugely important development.

Dean Lockhart: There has been a lot of talk about inclusive growth, and everyone agrees with that outcome. However, on the concept of hard alignment, do we need a better definition of inclusive growth? How can we measure it and track progress against that objective? The reason for asking that is that enterprise agencies and other panellists have told us that they do not have a definition to work towards and that inclusive growth tends to mean different things to different people. If we are to achieve hard alignment across different agencies, do we need a clearer definition of inclusive growth and what people are working towards?

Sir Harry Burns: Yes. I go back to the points that we made earlier about the failure of GDP to support action on inclusive growth because it does not take into account a lot of the problems that we see in society which prevent participation in the workforce and innovation, for example. I would certainly support our considering alternative measures that measure social progress and take into account inequality across life expectancy and the burden on the environment, for example.

I recently came across a quote from Robert Kennedy. He talked about the fact that GDP measures what it measures, but it does not measure anything that "makes life worthwhile", such as good environments, fairness and support for people in difficulty. That just about sums it up.

If we changed the metrics that we use for social progress in Scotland and included them with economic progress, we would see convergence between the inclusive growth agenda and the other agendas, and that would make Scotland a flourishing country that people would want to live and work in. That has to be the aim. At the end of

the day, that is what we want to achieve. We want people to look at Scotland and say, "Actually, that is a good place to live. We will go there."

I get invited to speak in Scandinavian countries. When I go to Sweden or Iceland, for example, I always say that it feels like Scotland; the only difference is that we have better weather, hard as that is to believe. There is a lot that would sell Scotland if we converged the four Is, particularly the inclusive bit.

Professor Carter: The question is interesting. I am clear in my own mind about what inclusive growth means, and I am sure that everybody has their own definition of it, but there is an issue about the definition that we can perhaps clarify. There are also measurement issues, which Harry Burns has just alluded to. However, from the agencies' perspective, the challenge operationalisation. Once we have defined what inclusive growth is and we have the measures, how do agencies go about operationalising it? That kind of road map would probably help the agencies to achieve that particular goal.

The initial question was about the four Is. It strikes me that internationalisation is one of the Is that we have not spoken about too much in this meeting. That is one of the areas in which the strategic board can help Scotland's economic strategy simply by aligning some of the agencies.

We have a bit of an issue with exporting in Scotland. We do not do enough of it, and relatively few companies do it. How do we get more companies to export more products or services overseas? Some of the most international establishments in Scotland are universities, and they have a very important role in helping businesses to internationalise. There is a promise of quite important developments in the alignment of the agencies—not only the front-facing economic agencies, but the skills and education agencies.

Dean Lockhart: I would like to clarify one point. Which agency will take the lead on taking forward the definition of inclusive growth and putting quidance around it?

Professor Carter: The discussions that we have had at the strategic board have included all the agencies, and we have all discussed inclusive growth. My understanding is that we have a common definition of inclusive growth and a common understanding of it. However, maybe we need to articulate a common understanding and a common definition. That might provide more comfort and clarity for everybody.

Gillian Martin: I have far too many questions. I will start by picking up on what Sara Carter has said about growth and the expectation of fast growth by the enterprise agencies versus

sustainable growth. Do we have the levers to encourage businesses to grow in a sustained way that is not just about the bottom line and turnover, but that takes into account issues that we have talked about, such as fair work and work practices that will release the potential of people? That seems to be often missed by the accountmanagement process of Scottish Enterprise.

Professor Carter: That is a very interesting question. The problem with Scottish Enterprise's account management is that it can include only a relatively few firms. Some 2,000 firms out of 360,000 is not many. The firms that are accountmanaged are, of course, rewarded by very important support from the agency.

As I have already said, we need to grow a much larger proportion of small firms. Almost by definition, small firms grow in a sustainable way. We rely on some fast-growth firms and we have seen the importance of some fast-growth firms, but they are rare examples. The majority of small firms are steady and sustainable growers. That is backed up by the evidence. Small firms also have a strong interest in promoting fair work and community orientation, and they are very much embedded in their local communities.

The business pledge is, of course, a lever that has been developed recently. Very important companies have signed up to it. One reason why small firms have typically not signed up to it is not that they are against fair work in any way but that the vast majority of them rely on self-employment or family labour. It is not that they do not want to pay anybody a living wage; rather, they do not pay themselves a living wage. They take drawings, which are more like pocket money, and they benefit from the business in other ways, such as through dividends or in their lifestyle. The living wage as a major plank of the business pledge possibly puts off many small firms simply because it is not relevant for them.

Gillian Martin: Are we not incentivising signing up to the business pledge enough? Should we, for example, make business support dependent on signing up to it?

10:30

Professor Carter: We could be a little bit more muscular about that. We could, for example, have the business pledge almost as a pre-qualifier for business advice and support in procurement. However, we have to recognise that for many small firms their not signing up is not because they disagree with the principles: they simply cannot, or they are in some way hindered by, for example, the fact that the business is a self-employed person, or someone who works with family members, partners, children or parents. There is

informality in labour in many small firms. That is by no means the case in all small firms, but many small firms rely on family labour, so paying the living wage is a big issue for them.

Gillian Martin: It has not been mentioned today, but skills gaps and access to acquisition of skills are issues, and have been identified by other panels as potentially impacting on Scotland's economic future if we do not address them. I offer that as a statement and would like to hear witnesses' feedback on it.

Professor Muscatelli: Skills are key if we are to have the virtuous cycle of innovation and new industry creation. Let us go back to the 1980s, when Scotland built up strength microelectronics, although that was not as long lasting as we might have hoped. It did not last because it was largely about manufacturing as opposed research and development. Nevertheless, it produced guite a lot of economic activity over a period. That industry was attracted to come here by the skills factor.

Sara Carter mentioned advanced manufacturing—thing such quantum as technology and life sciences. Those require very advanced technical skills levels, and not just what we might normally see as graduate skills. That could be about further education at a more advanced level and better interface between FE and higher education and the next stage of undergraduate-type training. We need to get that absolutely right: if a life sciences cluster were to develop around Edinburgh, Glasgow and Dundee and really take off, it would demand hundreds and hundreds of highly skilled people in labs, whom we would probably not be able to supply from our existing base. It will be really important over the next while to get that join between FE and HE absolutely right in order to feed the industries of the future.

Sir Harry Burns: I will say something about the lower end of the talent scale. I am involved in programmes such as developing the young workforce, Young Enterprise Scotland and so on, which give kids from difficult backgrounds access or exposure to opportunities to work, mentoring and so on.

The problem is not just absence of opportunity; there is a cohort of young people who come from difficult homes, who are badly behaved at school and who get excluded from school. Many of them will end up in Polmont young offenders institution, or something like that. As far as they are concerned, their lives are over. I have spoken to them and asked what they will do when they leave Polmont. They say, for example, that they have a criminal record, that they will never get a job, and so they will just sit at home, watch television and drink. I have actually had that said to me. Of

course, a baby then comes along and the cycle is perpetuated.

We need to think more clearly about how we support those kids. I believe that excluding them from school is completely the wrong thing to do. I know that the criminal justice system is trying very hard to find alternatives in support, social care and all that kind of thing; we need to think at that end as well as about the kids who are getting qualifications at school and hope to go on to work. There is absolutely a social justice issue there, but if we are thinking about cost, those kids are the people who will cost £1.8 billion over their lives. We have to work across the whole of society and we have particularly to pick up the people who are destined from an early age to failure.

Gillian Martin: There is a discourse in the media and politics around "productivity", meaning the bottom line, which is gross domestic product: reports come out and they always look at GDP. Do we really need to shake up that discourse and talk about how we address the situation using multiple interventions in a way that will benefit people?

Sir Harry Burns: When you said "productivity", what popped into my head is the thought that "productivity" should mean getting the very best out of our young people. How do we turn kids who are living in chaotic homes into the physicists of the future? Why not? They have brains, just as anyone else does, but they lose the capacity to learn and so on if we do not pick them up and run with them. Maybe we should set ourselves a target for making sure that no child fails—that a child failing is just not acceptable.

Professor Carter: I will add to that that productivity is incredibly important, but we are starting to think about this as a trade-off. We should not be seeing productivity growth and economic equality as a trade-off. As Harry Burns said, we need to make sure that as many people and places as possible contribute to and benefit from economic prosperity. For me, productivity growth is dependent on getting more people involved and more equal access to being able to contribute.

Professor Muscatelli: I will emphasise that skills enhancement is a way in which inclusivity and growth can certainly go together. We cannot just say let us get rid of looking at productivity and GDP—I am an economist, after all—because clearly some of the things that are important to us in terms of inclusivity are driven by those. Our tax base, for example, matters in respect of public services. The way to approach the problem is to take a "balanced scorecard" approach. We have to look at GDP and productivity—we cannot ignore them, but we must look at them alongside a number of social indicators in order to ensure that we do not go in the wrong direction with some

things at the same time as we improve productivity.

Gillian Martin: I have a final question. Witnesses all spend a lot of time visiting other countries and looking at what they do in terms of interventions. Is there anything that another country is doing well that we could adopt in respect of the things we have just talked about?

Professor Carter: One of the things that we have been looking at is the Organisation for Co-operation and Development's Economic division of countries into quartiles of performance on specific measures. I have found Ireland's performance in recent years to be quite compelling. One of the attractive elements of Ireland—which will benefit from Brexit because we are handing it economic growth on a plate—is that Ireland has shown a more cohesive and more joined-up approach to the national goal of economic development. Ireland and Finland are two countries that I would look towards in terms of alignment of agencies and a common goal.

Sir Harry Burns: Countries that came to the inclusive growth conference are trying all sorts of approaches—small countries including Slovenia, New Zealand and Costa Rica. Costa Rica is a very interesting country. It abolished its army thereby slashing spending because it has not been spending money on an army. I am impressed by Sweden, which was also involved in the inclusive growth conference. There are examples out there. New Zealand has just recently changed its Government: I am told that its Government is beginning to think about different economic models. As I discovered when I was in New Zealand last year, they are all Scottish.

Professor Muscatelli: I will complement what my colleagues have said, rather than duplicate it. I believe that what is happening in terms of commitment to innovation and productivity growth in Germany, for example, is also worth looking at. Some of our continental European neighbours recognise that there is a massive challenge out there in terms of having an aging society. If we do not manage to boost productivity, things could become quite difficult, especially given the competition globally, for example from Asia. The commitment to increase R and D-whether from public sources or private sources—as a proportion of GDP, is quite staggering. It is not only Germany, of course, that is doing that: many other countries are looking at it, including many smaller countries—for example, some of the Baltic economies. I think that that is really important.

Jamie Halcro Johnston (Highlands and Islands) (Con): Going back to skills, last week was national apprenticeship week, and a lot of my colleagues will have been visiting companies that have taken on apprentices and will have been

talking about the importance of apprenticeships. However, there still seems to be a focus on university as the first option, after which we have colleges and then apprenticeships following. Do we value apprenticeships enough in this country? Is there too much of a focus on universities? What recommendation would you make to the Government on the importance of apprenticeships?

Professor Carter: First of all, I would never say that there was too much of a focus on universities. That is not something that I would agree with. As for the question whether there has not been enough focus on apprenticeships, I would absolutely agree. Undervaluing apprenticeships has been a problem in this country. Interestingly, you do not find the same view in Germany, for example, or those kinds of technologically competent and developed countries.

The idea that universities are different from colleges and apprenticeships is, I think, quite old-fashioned. I see a great deal of college students articulating into universities and increasingly, graduate apprenticeships and the apprenticeship levy have enabled universities to offer university degrees to young people who are working as apprentices and who are able to study simultaneously. Ideally, we should be giving equal value to the various different routes that young people pursue and to vocational and academic pursuits. In any case, it is a bit of a false dichotomy, given that universities now teach vocational courses and that things that are vocational are academic, too.

Professor Muscatelli: I would echo that. Sometimes we get hung up on these definitional issues. When we compare data with other countries, we get into a rut, because people say, "Look what they are doing—it is totally different" when the reality is not quite that clear.

A similar question arose at the House of Lords Economic Affairs Committee, when I was asked why Singapore had fewer people going into higher education. The fact is that the polytechnics in Singapore are beginning to formalise into a kind of higher education system. We work with them at the University of Glasgow, articulating, if you like, some of those students into our engineering and computing science BSc degrees, and frankly, the technical and mathematical skills in Singapore's polytechnic system are as good as what we have in our higher education system.

It is a matter of definition. We have to look at the whole continuum from school to further education to higher education and make sure that we have the right skills pipeline. If that does not happen, we will just get into a rut, saying that it is about pulling this and not that lever. It is about getting the whole

continuum right, as happens in Germany, Singapore and Austria.

Jamie Halcro Johnston: What discussions have you had with the Government on this, and what advice are you giving it on ensuring that the whole process from school through the education system works in alignment?

Professor Carter: We have certainly commented on the apprenticeship levy and the very positive benefits that it might bring. Our discussions have also focused on learner journeys, following young people through school and the different pathways into the labour market. In fact, all of our work on that is infused by our focus on and conversation about inclusive growth, innovation and skills.

10:45

Jamie Halcro Johnston: There has recently been a lot of talk about people not necessarily having one career in their lifetime and about their having one, two or even three careers. How important is it that we are able to meet the reskilling and retraining requirements for people later in life, certainly for those who are over 24 but even for those up to 40 or 50 years old?

Sir Harry Burns: There are two sides to that coin: people need to have the opportunity to retrain, but they also need to have the resilience to cope with moving from one job to another and being tested in that way. Resilience is precisely what is often missing in young people who have come from difficult backgrounds. Time and again, we come back to the need to support families and young people who are on this journey and to give them a sense of control, of purpose and of meaning. We are making some progress, but we still have a long way to go.

Colin Beattie (Midlothian North and Musselburgh) (SNP): I do not think that there are very many countries in the world where Governments do not believe that they are supporting the local economy, businesses and so on. What should the Scottish Government be doing differently or doing more of either directly or through its agencies to support business in Scotland?

Professor Carter: I believe that the strategic board is addressing just those issues. If I were to say one thing about the provision of support in Scotland, I would say that there is some high-quality support. I am not sure that I would say that the landscape is too cluttered; that would imply that there is too much support, and I do not think that that is the case. There are still many businesses that do not benefit from support. I would also say that the customer journey is quite hard, as is helping people find their way through

that landscape. If we could simplify and clarify that journey, it would help enormously.

Professor Muscatelli: We are doing a number of things, and we have already discussed them, but one thing that we need to pay quite a bit of attention to, simply because it is quite a big investment that is on our doorstep, is the UK industrial strategy. It is not just about ensuring that we can leverage enough money for Scotlandalthough these are significant amounts that we are talking about—but about trying to avoid duplicating what is happening elsewhere. This is what most small economies in Europe do quite well. For example, Denmark and some of the Baltic economies look at what is happening around them. This is just an imaginary example, but if the UK industrial strategy were to put a huge amount into sector X in a particular regional economy of England, you might say that there was no point in duplicating that here.

We also have to be aware about how that sort of thing evolves. It is absolutely critical that we coordinate what we do with what happens in other parts and other UK regions. Frankly, that is what other small economies around Europe do.

Colin Beattie: Coming back to this issue of the cluttered landscape, we have heard other witnesses using exactly the same terminology. How big a problem is it? Are there too many initiatives, or are they not as joined up as they should be? What should we be doing?

Professor Carter: If we pay attention to the customer journey, it will reveal how easy it is to navigate one's way through the landscape. Indeed, the strategic board knows that it has to pay quite a lot of attention to this issue; in fact, the whole point of the strategic board and the alignment is to clarify, simplify and improve the customer journey as well as the learner journey.

I hesitate to say too much about this, but I know that other people have the same opinion. I am very aware of the businesses that do not qualify, that have not benefited and which do not know how to access support. There is a disconnect there, and I think that that is probably more important. What I would highlight are those disconnects and how we help small firms access the help and support that is available, because as we know there are many small firms that could benefit but which currently do not.

Professor Muscatelli: There is one aspect of the cluttered landscape that I would highlight. Whenever we start new initiatives, we have to try to make them coherent. I was very pleased that the implementation plan for the Scottish national investment bank talked about creating clear alignments—for example, by bringing into the bank the SME holding fund and the Scottish

growth scheme—to ensure that it was not putting in yet another element. This is not about proliferation; it is about saying, "Now we are bringing in the SNIB, let us agglomerate everything else." We need to do that systematically whenever we start new initiatives.

It was also good to see in the implementation plan a reference to looking at its relations with other lending institutions. Again, you do not want to crowd other initiatives out; instead, you want to make sure that what you do is genuinely complementary and different from what banks do or what the British Business Bank does.

Colin Beattie: Are there any specific areas where we should be doing more?

Professor Carter: I believe that there is a gap between start-up and account managed growth. That is where the vast majority of Scotland's enterprises exist and it is exactly where the gap is.

Colin Beattie: Is business gateway not supposed to help fill that gap?

Professor Carter: Business gateway is excellent with start-ups, but I am not sure that it is able to provide the kind of support that those businesses need to grow or even to aspire to grow and achieve their ambitions—or, indeed, to export, which is or should be an important part of their growth trajectory.

Professor Muscatelli: I am not trying to place too much of a burden on the SNIB, but the proposed scale of finance—of the order of £2 million to £10 million—is exactly what those companies need. With companies that show promise and could be accelerated, that is the sort of level of investment—and patient investment—that will be needed, but it is often very difficult to get it. No bank is going to lend that amount. It is quite difficult to access that part of the lending spectrum.

Colin Beattie: I think that Professor Carter said earlier that there are about 2,000 account managed companies in Scotland.

Professor Carter: Yes, as I understand it.

Colin Beattie: And that is out of 350,000 companies.

Professor Carter: It is out of 360,000 enterprises in Scotland.

Colin Beattie: How many companies fall into the gap that you have described?

Professor Carter: That is an interesting question. I also said that 70 per cent of those enterprises were self-employed and that 28 per cent of those enterprises employ between one and 49 people. What we are really talking about are the SMEs—in other words, the small firms or

those employing between one and 49. There is then the missing middle—there are very few companies of medium scale—and, as we noted earlier, we have relatively few large corporations in Scotland. We are talking about the small firms with only a few employees that might have the aspiration to grow but which have perhaps not achieved the growth trajectory or reached the growth thresholds that are required in order to get them into the account managed programme.

I understand that Scottish Enterprise has modified some of its thresholds, because it understands that growth is not linear. This is not a step change; sometimes, what happens seems to do so quite randomly, and it is not always sustained. As I said earlier with regard to the growth advantage programme that we have developed at Strathclyde, you have to really get under the skin of the companies to help support them in meeting those thresholds and achieving their ambitions.

Colin Beattie: I see where you are coming from, but what I am trying to understand is the resources that would have to be deployed in order to provide support for this missing section. Are we talking about 500 companies? Are we talking about 10,000? I am not sure.

Professor Carter: I cannot put a number on it. I can tell you that small firms in Scotland with a few employees make up about 28 per cent of our business base. Some of those will have received help; some of them will not want support or help; and some of them—in fact, most of them—will receive help from the private sector in the form of the accountants and professional advisers that they rely on. The public sector can play a really important role, but for businesses it is not be the be-all and end-all.

Professor Muscatelli: You will not be able to support all of them. Given the levels of investment that might be required, even if it is of the order of £1 million or £2 million, we will probably be able to support only a few hundred or so. That said, only 70 companies in Scotland account for most of our exports. If Scotland could double those numbers, we would do much better. The same is true with investment and innovation; transforming 200 of the companies in that interval to growth companies would make a huge difference.

Kezia Dugdale (Lothian) (Lab): I thank the panel for sharing their vision of the future for Scotland's economy and laying out some of the steps that need to be taken to get us there. To what degree is Brexit going to make that more difficult and, in particular, what is the difference between being in and outwith the single market?

Professor Muscatelli: People will know my view already. Being part of the single market is

critical not just to the whole of the UK economy but to certain sectors in Scotland in particular. The difficulty is that, with the exception of the very few sectors that can genuinely sell directly into a world market and which can therefore cope with tariffs, most of the sectors in the UK are really part of a chain. Because manufacturing engineering are part of a European value chain, not being part of the single market is a disaster, as most of those value chains will realign. As you well know, services are not covered by any free trade agreement that we know of-not the EU-Canada comprehensive economic and trade agreement or, indeed, any other agreement-so, as most of the analysis I have seen suggests, our not being members of the single market will be pretty disastrous in terms of GDP loss.

As part of the standing council on Europe, we saw some research that was published as part of the "Scotland's Place in Europe: People, Jobs and Investment" document and which showed very clearly that we might lose between 6.1 per cent and 8.5 per cent of GDP by 2030 if we are not part of that single market. That was validated by the UK Government's internal evidence, which was leaked to BuzzFeed and showed very similar numbers for the UK and Scotland. I think that most economists—I always tend to say 99.5 per cent of economists—agree that being part of the single market is absolutely critical to Scotland's economic future.

Professor Carter: I agree—it is nothing short of a disaster. Brexit is a disaster, and the idea that we can even contemplate leaving a single market is similarly disastrous. To the range of industries that Anton Muscatelli has highlighted, I would add agriculture and food, and the whole idea of food security. Britain cannot feed itself; indeed, we have relied on international trade to feed us for 200 years. The whole idea of coming out of a single market puts us in an extremely vulnerable position and is, in my view, a disaster.

Kezia Dugdale: I would like to hear from Harry Burns on this, too, but I wonder whether I can ask one more question before he comments. We often talk about the single market in the context of economic growth and trade, but it also has huge implications for social charter rights and the security of work. I am sure that you will have something to say about that, Harry.

Sir Harry Burns: That is precisely what I was going to say, and it is a real worry. It is now very clear that insecurity, whether it be housing insecurity, income insecurity and so on, drives bad outcomes and bad health outcomes, in particular. It is failure demand, and it drives people into hospitals, into offending behaviour and so on. Losing the social protection elements that we have

had for over the past 40-odd years will lead to real problems.

Another thing worries me and has worried me since about 2000, when I was asked to go to a conference on the future of the American healthcare system at Stanford business school. I sat and listened for two days, and as far as these guys saw it, the future of the American healthcare system was to get the World Trade Organization to deregulate health care so that they could bid to run other healthcare systems. That was, in essence, what it was all about, and it took a while for the penny to drop. Indeed, the Prime Minister has said that she would not rule out healthcare privatisation as a discussion point in any trade deal with the United States, and I find that really worrying. There is a whole range of social issues that I think we need to worry about, all of which might well make employment more precarious.

Kezia Dugdale: Another aspect of the single market is, of course, the free movement of workers across the European Union and the impact on immigration. What might that mean for Scotland, either for good or for ill?

Sir Harry Burns: Sometime in the next decade there will be more deaths in Scotland than births, and issues around the indigenous population and demographics will become much more difficult. Immigration, particularly from the European Union, has been an important source of young talent.

Kezia Dugdale: Does it undercut wages? **Sir Harry Burns:** Not as far as I know.

11:00

Professor Muscatelli: I do not think there is any evidence that it undercuts wages. The best paper on the impact of EU immigration on UK workers was produced about two years ago by the London School of Economics, and it focused on different local authority areas in the UK and on whether there was any correlation between the number of EU migrants coming in and unskilled UK workers. There was zero correlation—absolutely no evidence. Frankly, to suggest that there is an impact flies in the face of the evidence. The one study that seemed to show some effect was negated by this LSE study, which stripped out all non-UK workers and showed that there was zero impact.

The Convener: Looking at this from a slightly different angle, I see that over the past five years, Germany has massively increased its exports to China, which is not in the single market; in fact, it has become China's largest trading partner. What is preventing the United Kingdom from taking such steps in the world markets when other countries have done so?

Professor Muscatelli: That is a perfect example of why any suggestion that our being inside the single market has held us back is spurious. Other countries in Europe have been very capable of growing. Some of it is about the sorts of products that Germany offers, especially in the automotive and the advanced industrial sectors, where China needs to tool up.

Let me put this another way: the EU has done a huge number of trade deals with third countries over the past few years, and we benefit from those by being inside the EU. We will potentially lose them if we decide to go for a free-standing FTA, and that, frankly, would be a huge loss. The sort of deal that we could negotiate with China would not have the same terms as the sort of deal that the EU could negotiate.

The Convener: But you accept that it is possible to increase exports, whether you are within or without the EU.

Professor Muscatelli: It is much easier to do that if you are part of the EU trade bloc, particularly with third countries—including those in Asia—simply because of the types of deals. The deals that the EU has struck with Japan and South Korea—and the deals which it is likely to strike in future with other countries—are much better than anything that any single country can do. We are a country of 60 million-odd people; it is pretty much a given that a trading bloc of several hundred million people will generally be able to strike much better deals.

The Convener: We will have to leave that discussion there. I thank our guests very much for coming in, and I suspend the meeting for a changeover of panels.

11:03

Meeting suspended.

11:09

On resuming—

The Convener: I welcome our next panel of witnesses. We have Laurie Macfarlane, who is a research associate at University College London's institute for innovation and public purpose; Kerry Sharp, who is a director—or perhaps the director; I do not know—at the Scottish Investment Bank; David Ovens, who is chief operating officer at Archangels; and Peter Reekie, who is chief executive of the Scottish Futures Trust.

I start with a question about the level of investment in Scotland, and I think it applies to the UK as well. Will you comment on why our level of investment is lower than the levels in other countries and how that applies to different areas?

Kerry Sharp (Scottish Investment Bank): We have a challenge to do with data, because we do not have many international comparators that we can look towards. The ways in which people collect their data and publish it are very different across the world, so it is difficult for us to look at what we do in Scotland versus what is carried out elsewhere.

Within Scotland, over the past 10 years, there has been a massive increase in the funding market on the risk capital side, which is the side that I am more focused on. If we go back just shy of 10 years, there was about £100 million of risk capital investment in Scotland. Now, it is at about the £400 million mark, give or take. There has been quite a rapid increase in that area and there are lots of different elements to it. For example, smaller businesses are getting more funding at the sub-£1 million level. Quite a lot of additional funding is flowing into companies and there are also a number of larger investment deals. The past three years or so have seen more of the £20 million-plus deal size, which is quite unusual.

Scotland has always fared slightly less well on the bigger deal sizes. No proper analysis has been done but, two or three years ago, we looked at what we see as our comparators and at where we played in that market. We needed more of the bigger deals, and we have started to see them coming through over the past three years. We feel that we are now a better player on the overall international scale.

Laurie Macfarlane (UCL Institute Innovation and Public Purpose): If we look at the available international data and compare investment levels in Scotland and indeed the UK at an aggregate level, we see that, overall, the level has for a long time been lower than the levels in comparable advanced economies. In the UK and in Scotland, it is roughly 17 per cent of GDP. The UK's level is 118th in the world, according to the World Bank, which is down at the lower end of the scale. That is for overall investment-both public and business. Within that, levels of business investment are again relatively low both in Scotland and in the UK. Scotland's level is slightly lower than that of the rest of the UK.

If we look at the picture over the past 10 years—this is at the UK level, because the data exists only for that—it is particularly concerning that the level of growth per person of the capital stock minus depreciation, which is basically what we need to stand still, has been negative since 2012. That means that there has not been enough investment to maintain the capital stock at that level. That is concerning, and it has links to other issues such as productivity.

Another thing that stands out internationally is the UK's particularly low level of research and

development investment. The committee has heard about that in previous evidence sessions. The UK level has been falling for the past 30 years, and Scotland's level is lower within that. There is lots of evidence that R and D investment is important for a range of things including innovation and productivity.

Overall, when we look at the broad-brush picture, there is a case that Scotland's level of investment is lower than the levels of other countries. It is important to ask why that is the case, whether it is an issue and, if it is, what we should be doing about it.

The Convener: Do you have any ideas about why that is the case?

Laurie Macfarlane: I think there are a range of contributing factors. One that is often pointed out is that the industrial structures of Scotland's economy and the UK's economy are very different from those of other countries. For example, people point to Germany, which has a much higher level of manufacturing. It tends to have much higher levels of investment in capital equipment than a services-based economy does. However, even when we adjust for that, our level still stands out as being a bit lower than the levels of other countries.

There are other issues that we might come on to talk about, such as the availability of finance and the type of finance that is available. There is also some evidence that the corporate governance arrangements in the UK and the US have incentivised a focus on the short term rather than a focus on longer-term investment, which has incentivised companies to put off longer investment decisions in favour of doing things such as share buy-backs.

11:15

There is also the issue that businesses will invest on the basis of future growth opportunities. They will invest if they are excited about opportunities and they can identify areas to invest in that they think they can make profits out of. It is about that kind of animal spirit. In some cases, Scotland and the UK have got better at that in recent years through some of the interventions that have taken place, but unleashing that animal spirit of firms that are willing and able to grow, expand and innovate is something that we perhaps do not do quite as well as other countries.

Peter Reekie (Scottish Futures Trust): I can speak more for infrastructure investment and public investment than for anything else. As you heard from the previous panel of witnesses, that has been hit significantly since the global economic crisis of 2007-08. Since then, public

budgets for spending on infrastructure have dropped significantly.

In Scotland, we have been using all the levers that we have to try to maximise infrastructure investment because of the impact that it can have on the economy in both the short run and the medium to longer term—although the short-run impact is supported by a lot more people than the longer-run impact, which is questioned by some people. We can come back to that if you wish. Things such as tax increment financing and the non-profit-distributing programme have been put in place to try to use all the available levers to maximise investment during that period.

Scotland has a reasonably good regional performance. The OECD report on transport said that, in 2016, Scotland was the region outside London that had the most investment. The commentary of Graeme Roy's Fraser of Allander institute shows that, in 2014-15, the construction industry in Scotland was particularly strong, which was driven by public sector infrastructure investment. Across all the areas where the public sector spends and invests money, it has a particularly high multiplier effect, so it is a good thing to invest in and spend money on to get that short-term economic effect. The longer-term impact of that investment is more characterised by the need to make the investment in the right thing.

The short-run economic impacts of investment in infrastructure activity—the Keynesian effect, if you like-is much the same whether we are digging holes and filling them back in again or rolling out broadband infrastructure across the country. The medium and longer-term impacts are massively greater, I suggest, if we make great investment decisions about where to focus that infrastructure investment. There are strong links with things such as decarbonising to transform the economy, and digital connectivity. I note the information that the OECD has given you on the correlation between broadband and mobile connectivity and productivity. We can definitely make the best of that investment by directing it to the right place.

However, connectivity is not everything in that investment. A lack of affordable housing can be a big barrier to an economy in a particular place, and the social infrastructure is really important for the inclusive growth that we have talked about, particularly in relation to young people and creating aspiration through having great places to learn.

Across all of those areas, infrastructure investment can do a lot for the economy and for inclusive growth, but the SFT and a lot of other people are particularly engaged in targeting it in the right place. That will give maximum benefit

over the medium to longer term as well as the short-term impact.

David Ovens (Archangels): I want to pick up on Laurie Macfarlane's point about R and D. In Scotland, we do really well on R and D through the universities. We have some world-class universities. The problem is that R and D can take a long time to commercialise, so it is not necessarily an area that conventional providers of capital want to invest in-I am thinking of private equity, venture capital and corporates-because they require a return on their investment. From our track record as investors in early stage R and D companies, we know that it can take 10 years plus to get a company from the stage where it is developing an interesting piece of disruptive technology to the point where that technology reaches maturity or the company that we are investing in reaches commercial maturity.

I echo Kerry Sharp's point about levels of investment in the early-stage risk capital market, which is where we operate. Over the past 10 years or so, we have seen an increase in investment capital in that area, which has been driven partly by the establishment of the Scottish co-investment fund back in 2003. That has leveraged in, or crowded in, an additional number of private sector players. If we look back to 2003, there were half a dozen or so business angel syndicates operating in the market and those are the people who invest in early-stage technology businesses. This year, there are 20 or so.

LINC Scotland is the umbrella organisation for business angel syndicates in Scotland. If we look back to the point where the Scottish co-investment fund was established, LINC Scotland, which probably accounts for about a third of the investment activity, was doing around £10 million of investment activity in the sector. In 2017, it was doing £50 million. You can see that the policy intervention has had a significant impact.

However, the fundamental problem is that R and D takes a long time to commercialise so, if we are going to encourage investment in the sector, we need policy intervention in the sector.

John Mason: I seek a bit of clarification, because I feel that we are getting a mixed message. I am thinking, "Did the financial crisis have a big impact?" Peter Reekie specifically said that it did and that things have been bad since then, but Kerry Sharp said that, over the past 10 years, there has been an increase from £100 million to £400 million of investment, and David Ovens said that there has been an increase since 2003. Was that dented by the financial crisis? I am trying to get a picture of the whole thing over the past 10 years.

David Ovens: I think you have to look at the stages of company evolution. We invest at a very early stage in a company's evolution. Typically, for us, it will take about £10 million of investment capital to get a company to the point where the technology is mature enough and the company is commercially mature enough for other sources of more conventional capital to be interested in it. In that specific context and that specific space, we have seen an increase. Undoubtedly, we have seen a decrease overall in the level of capital investment into businesses, and specifically into more mature businesses.

Kerry Sharp: The financial crisis had a huge impact on banks and the debt market. It also had an impact on the equity market, but not as much. Also, equity is high risk, so you are taking on board the risks that exist in the market to invest through equity. We are talking about slightly different things there as well.

Peter Reekie: I am sure that you are all aware of the impacts of the global financial crisis on public budgets and the time that has been taken to recover. In the past year or so, there have been some more significant increases in capital budgets, but until then there were impacts on public budgets and the capacity to invest.

John Mason: Has the change in the rules had an impact as well? The private finance initiative and all those schemes were used to get things off the public balance sheet, and that has also affected the Scottish Futures Trust, NPD and so on. Has that had an overall effect or does it just work its way through the system?

Peter Reekie: The programmes of activity—the NPD and the hub design, build, finance and maintain projects—were designed to deliver additionality of investment, and I have said here before that the change in the rules in respect of NPD has stopped that. There is an impact on additionality and the capacity to invest over and above capital budgets, but we also need to be mindful of affordability. It is not something that we can keep on doing forever in that way. As you may know, the Scottish Government has set a long-term cap on repayments of 5 per cent for that sort of capital investment paid for through a long-term revenue budget. It is a balance between those two things.

John Mason: It has been suggested to us that there are so many schemes and so many ways of providing additionality as well as traditional funding that small businesses, especially, may be confused by the landscape. Nora Senior touched on that when she was here. Is the marketplace too complicated or is that being overstated? Are different companies affected differently?

Kerry Sharp: From a small-company point of view, it can be challenging to understand the landscape, and we are very aware of that. Companies range from having very little knowledge of finance through to having a lot of experience but, even when a company knows a lot about the difference between debt and equity and the like, it can still be difficult for it to understand where to go.

Across the public sector in particular, we have tried to take a lot of action to make things more streamlined and make it easier for customers to understand them. We are taking forward a lot of digital approaches to try to allow the kind of customer journey that was talked about earlier so that companies can see where they need to go. There is no doubt that there is complexity, but ultimately it is about trying to provide as many different products and interventions as possible to support as many different companies as possible, and by the nature of that, there is a lot out there.

Certainly in the public sector—we try to work closely with the private sector on this as well—the need is to co-ordinate and align what we do rather than to take things away, because, ultimately, there would be companies that lost out if we did the latter.

John Mason: Is that your view as well, Mr Ovens?

David Ovens: Absolutely. There are lots of effective interventions out there. From an investment perspective, the Scottish coinvestment fund is certainly one of those, and the account management system within Scottish Enterprise is definitely one of them as well. The dots could be joined up a bit better and the whole thing could be simplified from a company perspective, but the interventions that exist are largely effective.

John Mason: You would not take anything away.

David Ovens: No. I would add to them.

John Mason: Okay. Thank you.

Colin Beattie: A number of witnesses have thought that Scotland lacks ambition. Do you agree with that? If so, why?

David Ovens: That is a difficult question. Scotland does not lack ambition. There is certainly a lot of ambition in the entrepreneurs that we back and the business plans that we see, but entrepreneurs need support to get there.

I will take a step back. We are talking about GDP growth and how to get it. In effect, we are looking to expand the productive capacity of the economy in Scotland, which means increasing the number of companies that export and the number

of well-paid jobs, and therefore adding to the pool of people who are in the higher and additional tax band. Dean Lockhart touched on this earlier. We need an industrial strategy in Scotland that links into the UK context, but we also need to look at specific sectors in Scotland that have the capacity and ability to provide additional high-paid jobs and to produce companies that export. We need a specific strategy in all of those sectors and intervention from the public sector to help to address the deficiencies in specific sectors.

There is a lot of ambition in technology, but specific market failures need to be addressed. The biggest challenge is in the provision of scale-up capital. I am encouraged by the ambition of what Benny Higgins set out in his implementation paper for SNIB. If that is implemented with the ambition that he set out, it could be a really useful intervention.

I do not think that there is a lack of ambition in Scotland, but we need to be better at encouraging people with ambition to grow their companies and facilitating that.

11:30

Kerry Sharp: The companies that we and Archangels invest in are certainly ambitious ones, but there are a number of challenges. We can sometimes get frustrated when the demand for products that are put to the market is not as much as we would like it to be. One of the big discussions in the national investment bank discussion was about the supply of finance being very important, as the demand is. Having ambition behind the companies and investor readiness to be able to access the capital are important.

A report from the British Business Bank a couple of weeks ago looked at smaller companies and their financing needs. One of the statistics that jumped out at me was that 70 per cent of companies do not want to take on any funding to grow their business. They are happy to take less growth in their business rather than take on external funding, which is not good. Is that a lack of ambition? Is that borrowers being discouraged? Is that because of issues to do with how they think they will be treated in the market? It is difficult to know, but we need to look at the demand side and ensure that we can create demand and deal with it, and that, when there is supply, intervention is available and companies can get funding and grow for the success of the economy.

Colin Beattie: I am pleased that there is a bit more optimism about the ambitions of Scottish companies. To lead on from what both witnesses have said, I presume that there is a reasonable supply of funding for those companies.

David Ovens: We need to look at specific industry sectors, drill down and understand where the market failures are. Let us consider the technology sector. One thing that we have done really well in Scotland is that we have developed an ecosystem in which somebody who wants to commercialise R and D can get the first chunk of funding. We have a really good ecosystem in which Scottish Enterprise plays a large part. If someone wants to raise the first £2 million of capital, they can do it relatively easily in the Scottish context. However, we have invested for 25 years in innovative companies, and we know that it takes more than £2 million to get a company that has interesting technology to the point at which it commercialises that technology. That can take up to £10 million.

I will give members two specific examples from our portfolio. In 2003, we invested in Touch Bionics. That was literally in an idea—a concept. It was a spin-out from the Scottish health service in 2003. It does prosthetic upper limbs and bionic arms and hands. We put £12.5 million of investment capital into that company over a 13-year period to get it to the point at which it was of interest to a purchaser.

Optos plc created a retinal scanning device. Again, there was a piece of paper and an idea—that was back in 1992. It took £38 million of investment capital over a 14-year period before it was listed on the London Stock Exchange. It now employs 400 people worldwide; some 200 of them are employed in Dunfermline.

Earlier, we talked about the problem that investors in that early-stage technology space are largely high-net-worth individuals. Therefore, we are talking about business angel syndicates, in effect. Our problem is that those individuals can go only so far. Without policy intervention that allows them to go further, there is a real issue. Companies that are innovative, have high-growth potential and could be exporting companies of the future are just not able to access the capital that they need to do that. The specific gap in the market now, which has been identified through the SNIB implementation report, is £2 million to £10 million of investment capital. There is not enough of that in the market in Scotland just now.

Colin Beattie: Are you saying that the Government should provide that?

David Ovens: No. I think that the Government should encourage the private sector to provide it. If we look at policy intervention currently, we see that, at the UK level, our investors are incentivised through tax incentives. The main tax incentive is the enterprise investment scheme, but there are others, such as the venture capital trust rules. At the local level, the investment that we make is leveraged by Kerry Sharp and her colleagues

through the Scottish Investment Bank. I am encouraged by Benny Higgins's report on SNIB. We are now looking at that £2 million to £10 million gap and saying that we can leverage further and try to crowd in the private sector to address that specific market failure.

Colin Beattie: In light of what you have said, is there a disconnect between the supply of finance and the demand for finance? Is that universal or just sectoral?

David Ovens: I can talk for the technology sector, which is my area of expertise. In the early-stage technology sector in Scotland, the supply of capital does not meet the demand for it.

Laurie Macfarlane: It is important to make a distinction between the quantity and quality of finance. Generally speaking, there is lots of finance in Scotland and the UK. We have one of the largest financial sectors in the world relative to the size of our economy. Much of that does things such as mortgage lending and intra-financial lending. We do not have much of the long-term, patient and committed finance that is needed and which David Ovens identified. That is particularly important for innovation.

If you look at countries and other places that have been particularly successful at that, you will regularly see that there has been an important role for public policy and early-stage public funding. Places have flourished through having smart and innovation-led economies. Research and development agencies in the US, public venture capital funds—I refer to the Yozma Group in Israel, for example—and state investment banks such as those in many European countries have been critical in fostering and catalysing innovation. We should focus on the quality of finance in specific areas of the economy rather than the overall quantity of finance in the economy.

Colin Beattie: You referred to patient finance. Previous witnesses have talked about the distinction between providing equity capital and providing debt. Is that an important factor for you as well?

Kerry Sharp: Equity and debt are different and for different purposes, but both can be patient in their own right. When we talk about patient capital, we are in the main referring to equity and that later stage. To go back to some of the earlier points, the challenge that we have in the market is that a lot of the funding, when it is provided, is provided through closed-end funds. There is always a timeline for funding to come out, because investors need to make their money, otherwise they would not do it in the first place. A lot of funds have a timeline of around 10 years or sometimes a little longer, but longer than that can be required, as in the examples that David Ovens used earlier.

The British Business Bank report talked about exits that are at 10-plus years. We used to talk about five, six or seven years and, for the past number of years, it has been 10-plus years, but that does not suit a lot of funds.

There is a need for capital that does not have to follow that life cycle and that can be there for longer, to support companies through the growth trajectory. Ultimately, companies need to have choices for growth and, if the equity funding is taken away, they have limited choices. Either they need to sell or they need to make an initial public offering, which might not be right for the business if they want to grow. Ultimately, we need a number of different players with different types of instruments and different capabilities when it comes to how patient they can be, to ensure that our companies can pick and choose rather than go with whatever is available in the market.

Colin Beattie: Will the SNIB be providing equity capital?

Kerry Sharp: That is certainly recommended in the implementation plan. Clearly, that is Benny Higgins's plan and it is for the Government to decide what to do but, if the SNIB is implemented in the form that has been set out, we will certainly be doing that.

Gillian Martin: A few witnesses have told the committee that, because of the financial crash, high street banks are not fulfilling the role that they used to in supporting small businesses and particularly start-ups.

We have heard that other countries do things a little bit better than we do. For example, Germany still has the Sparkasse model, which provides locally focused, not-for-profit assistance and loans, not just in the domestic market but for businesses. Ireland is considering adopting the Sparkasse model. Should we?

Laurie Macfarlane: That is an interesting question. You mentioned the shift in the banking sector in the UK since the financial crisis. There is a kind of longer trajectory of shifts that preceded the financial crisis, which has been a shift in consolidation in the UK banking sector. Whereas previously we had quite a lot of players-some were regionally or locally focused and there were different models, with more building societies, savings banks, trusts and so on-we now have a fairly consolidated sector that is dominated by a few high street banks. As you said, that is very different from the situation in other countries. Germany is perhaps the biggest example at the other end, as a large proportion of the banking sector there is focused on public savings banks the Sparkasse—which are a kind of decentralised network of publicly owned institutions. They provide the backbone of SME lending in the German Mittelstand, which is the kind of heartland of SMEs and the industrial heartland of Germany. There is also quite a vibrant co-operative banking sector in Germany as well as the commercial banking sector.

It is important to highlight the shift in the UK away from what used to be relationship-based lending, where someone would have a relationship with their branch manager, who would have the power to make decisions and would make decisions based on the relationship with the business. A lot of that has shifted in favour of centralised credit scoring. There is evidence to suggest that that shift amplifies the market failure that has long been identified with SME lending, through information asymmetry between firms and lenders and by doing away with that softer information exchange in banks.

Today, very little of the lending by high street retail banks in the UK is for business. According to the Bank of England, 4 per cent of all bank lending is for SMEs and less than 10 per cent is for what we might call real-economy business, which means non-real estate related and non-financial sector related lending. It is a very small part of what banks do. There has been quite a big shift. Indeed, a lot of that precedes the financial crisis.

Obviously, since the financial crisis, there was the credit crunch, with a real pulling back from lending of all kinds, including lending to business and mortgage lending. That has started to recover somewhat now. Lending to non-financial corporations has turned positive again in the past few years. It is certainly interesting to look at how different types of institutions perhaps serve different types of customers better and what we can learn from other countries on that.

Gillian Martin: High street banks are closing branches, which is affecting domestic customers, but there is also the gap that you and previous witnesses have identified in the financial support and lending given to SMEs. I would be interested to hear from other panel members whether you think that there is that gap in the market on both sides that could be filled by the not-for-profit model and regional lending of the Sparkasse in Germany.

Kerry Sharp: The evidence that we have suggests that companies that are looking to borrow less than £1 million certainly face a challenge. That is the most difficult kind of lending to get. We need to bear in mind two of the things that lie behind that. First, obviously, companies need to be viable to get funding in the first place, and there is a question about whether that is the case for a lot of the companies that are unsuccessful. The other point is that loans need to be paid back—that is just the nature of them—and, particularly for early stage and start-up

companies, they are not always the right instrument. Equity, which we have mentioned a lot already, could be a more appropriate instrument for companies than lending, and a number of grant interventions from Scottish Enterprise and others could also provide support.

I do not know whether there is a particular need for a non-profit-making intervention, but I guess that, in the public sector, we would always start with non-profit making, given that there is a need for public sector resources to be returned and to be recycled into other areas. We certainly recognise that that area in the debt market needs to be looked at. The Scottish national investment bank implementation plan mentions looking at that lower level of debt to see what can be done.

Gillian Martin: You mentioned Scottish Enterprise and account management, but we have already heard from many other panels that there are often barriers in place, particularly for womenled businesses, which are not getting equity in terms of access to business support from the larger agencies. Do you agree that there is a gap in support of that type?

11:45

Kerry Sharp: Sorry, but what type of support do you mean?

Gillian Martin: I mean financial assistance and business advice. That gap could be filled by something like a not-for-profit bank.

David Ovens: If we are talking about policy intervention, policy should intervene where there is a market failure. Kerry Sharp made the point that debt is an appropriate funding instrument for companies that are mature and that can service that debt. We have big banks in the UK that should be capable of filling that gap.

The real market failure is in the equity capital space. R and D companies do not generate turnover for the first few years but, even when they start to generate turnover, they tend not to be profitable for a long period and therefore the appropriate financial instrument for them is equity rather than debt. I believe that the focus of the SNIB should be on equity rather than debt.

On your point about women entrepreneurs, a quarter of our portfolio is led by female chief executive officers, so we see ambition across the spectrum.

Dean Lockhart: We have discussed the SNIB, which has been launched with quite a lot of publicity. It is committing to invest hundreds of millions of pounds in the Scottish economy and Scottish business. Eighteen months ago, the Scottish growth scheme was launched, with a similar commitment to invest up to £500 million in

the Scottish business community, but I believe that, so far, it has invested only £25 million of that. What are your views or insights as to the reasons behind that very limited investment from the Scottish growth scheme in expanding businesses?

Kerry Sharp: It is fair to say that, with any new initiative, it takes time for funding to be invested. I am sure that the Scottish growth scheme, like any other scheme that is launched, will be subject to that. We have benefited twice now from funding through the Scottish growth scheme. One was for Scottish-European growth co-investment programme, which so far has not invested any of the funding that the Scottish Government has committed to it, but that is just the nature of the programme. It is a new programme that works alongside the European Investment Fund. It is in that scale-up capital space, so it is particularly relevant at the moment, but there is nervousness from companies and from investors about Brexit and other things. Another issue is the nature of the programme, which is different, new, first in class and has never been done before—we are the first in Europe to do it. It has taken time to educate the companies and speak to investors. There have been a lot of inquiries and discussions with investors, and we are hopeful that we will start to spend some of that Scottish growth scheme money soon.

Dean Lockhart: Would there not be similar concerns surrounding the Scottish national investment bank? We understand that the Scottish growth scheme will be taken under the umbrella of the SNIB, so what can we do to prevent similar issues arising when the SNIB is implemented? As a supplementary question, are we seeing a lack of demand from expanding businesses? Is that part of the reason why there has not been a stronger uptake of the money available under the growth scheme?

Kerry Sharp: There is nothing that we need to prevent as such. It is just the nature of the funding that is available that it takes a while for companies to understand that it is there and what it is, to ensure that they are investor ready and to be able to access it. With any new funding instrument, the demand needs to be either upskilled or set alongside it from the point of view of being ready to access it. I do not see that as an issue to be avoided with the new national investment bank, although we should certainly be aware that things do not happen overnight—they take time.

Dean Lockhart: A lot of the discussion so far has understandably been about finance. Moving on to another issue, what other challenges do expanding businesses face in Scotland? What are the typical barriers to companies moving from where they are to expand their business or to

move into the export market? What policy responses work best to address those challenges?

David Ovens: When we look to invest in companies, the three aspects for us are the product, the market need that that product addresses—it needs to address a specific market need; we are not particularly interested in things that are trying to create a new market—and the quality of the management team. The access to capital is a given because, if we decide to invest, we will support that company for the duration. However, the biggest challenge that companies typically have is that, when they move from that R and D phase to the commercialisation phase, the skill set that individuals running the business need changes over time. Therefore, access to talent is one of the key challenges that companies face. As we breed success in the ecosystem, with companies such as Skyscanner, that sort of talent is re-emerging in different guises in the sector. We also have significant support from SE in that regard.

Kerry Sharp: Through our model, we work with private sector investors such as David Ovens, so it will not surprise you to hear that I agree with all that he said there.

We always see funding as absolutely critical, but alongside that are the skills. Those include the skills in the company as well as leadership skills. Obviously, growing a company, particularly a global company, takes a lot of skill and expertise, so it is important to be able to locate them in Scotland or to bring them in and to be able to recycle them within our company base and the new opportunities. Scottish Enterprise and Highlands and Islands Enterprise have a number of leadership support schemes, which are critical to enable companies to grow and to start to export and become global companies in due course.

Dean Lockhart: My next question is on the use of digital technology in companies. David Ovens said that he focuses on technology companies, but this is not a sector question; it is more on the use of e-commerce in companies. Does Scotland have the right policies in place and are businesses using e-commerce enough, both for the domestic market and for the export markets? Could much more be done when it comes to companies and the business community using e-commerce?

David Ovens: E-commerce is fundamental to growing companies. The patient capital review that the UK Government initiated looked at a cohort of 1998 companies and at which of those companies had grown over a 15-year period. It was a very small number, but the key driver was the adoption of new technologies and of digital processes in the business. As a driver for growth, it is important. I am probably not qualified to comment on the

policy position, but obviously connectivity and access to broadband are critical to that.

Kerry Sharp: I do not think that we are doing enough on that—there is a long way to go. I agree with David Ovens entirely that the future is very much digital based. In Scottish Enterprise, we are seeking to support a number of companies in that move. We take what we call a digital first approach, both within Scottish Enterprise and in support of our companies. Across the economy, there is definitely a need for us to embrace digital and what it can do for us. When we do that, the benefits that we will get from it will be dramatic, as the economy starts to grow.

Andy Wightman: The focus of this inquiry includes identifying

"challenges and opportunities facing the Scottish economy over the next ten years and ... what action is required to make"

the

"economy more inclusive, innovative and international."

That includes our taking a view on what we see as the role of the Scottish national investment bank. In that respect and given that he has looked at these institutions, I would be interested in hearing Laurie Macfarlane's views on the lessons that we can learn from other state investment banks and on what we, as parliamentarians on this committee, should be looking at most particularly as the Scottish national investment bank develops.

Laurie Macfarlane: Part of the work that we have been doing at IIPP has been on the role of state investment banks in other countries around the world and what we can learn from that, and straight away one of the key things that one notices is the difference between institutions that are sometimes called mission led, which are focused on specific challenges or problems that have been identified in that country and which drive the activity of those institutions, and other institutions that have a more static mandate and which focus on competitiveness, growth and so on. Such institutions have directionality built into them; they are not just about fostering growth or innovation, but about having directionality to that growth and innovation-in other words, what kind of growth and innovation that people are looking for.

For example, the activity of one of the most successful banks, the German KfW, is steered by three so-called megatrends or grand challenges, one of which is climate change. About 35 per cent of all KfW's investment is orientated around that mission. That means not just investing in green sectors or traditionally renewable energy, but working with steel and other industries on greening their activities. The other megatrends that KfW focuses on are how the German

economy can adapt to demographic pressures such as the ageing population and technological progress and international competitiveness.

Taking that kind of mission-led approach instead of being static and focused on growth and competitiveness—or instead of picking specific sectors—can be very successful in fostering growth and innovation, and it avoids some of the pitfalls that some of the banks and other institutions that have focused purely on certain sectors have succumbed to. After all, simply deciding to pick and support a specific sector can have its drawbacks. That is important.

Other things should be borne in mind. We have already talked about the bank having different types of instruments at its disposal; if you are going to have a wide remit and play quite a significant role in the economy, you need different types of instruments to match different types of projects in different areas of the risk landscape. Certainly an ambition for the bank set out in Benny Higgins's implementation plan is to have the ability to offer a wide range of different instruments to support investments in line with its different missions.

The implementation plan makes it clear that the bank's ultimate remit and mission will be set by the Scottish Government. The report contained some recommendations on the low-carbon economy and demographic issues, with local regeneration and place making as potential candidates in that respect. The process for setting the bank's missions of and their monitoring, evaluation and assessment over time will need to be considered. Interestingly, the implementation recommends that the Government set up a stakeholder advisory group to feed into that process, and an interesting question that will need to be thought about is how we engage wider civic society in the discussion about the priorities that the bank should be focusing on.

Andy Wightman: No one else seems to have any observations, but I am content with that answer.

I am particularly interested in the extent to which we build in flexibility for and democratic parliamentary oversight of this institution. Do you have any thoughts on that?

Kerry Sharp: Flexibility is fundamental. As far as this area is concerned, we are all trying to work out where the gap is; we want it to have a start and an end and to be able to describe it, but in reality it does not work like that at all. Gaps are evolving and the parameters are changing all the time. It is therefore very important that we have a support mechanism that can be adapted to address either the evolving gaps or something from left field that we do not expect to get round

very quickly and to provide something that will support companies, instead of our going through a whole process of identifying the gap and then giving support. For me, flexibility in the model will be a huge part of its success.

12:00

Gordon MacDonald: This morning, we heard about a lack of medium-sized companies in Scotland. Half a per cent of our companies are large ones employing more than 250, and there is a big gap between small and large companies, with no medium-sized ones. If I have understood David Ovens, it takes about 10 years to get from development research and start-up commercialisation. However, there comes a point when investors want a return on their money—I think that someone said that that happens when the company is attractive to a buyer. What is the benefit to the economy of having long-term equity financing in place for those growth companies and for the quality of jobs and job creation in the supply chain? Secondly, are there countries in Europe or wherever that have got this right, by which I mean they are not forced to sell companies when they reach a certain scale?

David Ovens: On the first point, we got the Hunter centre for entrepreneurship to look at the economic impact of what we do, and it found that for every £1 that we invest in these companies we generate up to £14 of turnover. Turnover is important, because it adds to GVA in the economy and for every £1 that we invest, we are creating up to £9 of GVA. That, too, is important. We are talking about very high-risk companies—up to half the portfolio will ultimately fail—but even with the companies that have failed we have still added economic impact through our investment. They have paid suppliers and employed people, but in the interests of sustainable growth, it is important that we ensure that some of these companies become sustainable standalone companies.

I apologise if I gave the impression that all of our companies get bought over—that is not the case. We are trying to take companies to the point where their options are open, and in a large number of cases, the option will be a trade purchaser. Equally, it could be private equity or access to corporate venture capital, IPOs or whatever. With the two companies that I mentioned earlier-Optos and Touch Bionics-we invested in them when they were nothing more than ideas on a piece of paper. When we exited Optos, it was employing 400 people; although it is now owned by the Nikon Corporation, it still employs 200 people in Dunfermline and is therefore still having a real economic impact there. Similarly, Touch Bionics was only a concept when we invested in it, but when we exited, it was employing 125 people. There is a clear economic impact if you can get things right.

Kerry Sharp: The acquisition of a company can be a good thing for its growth. As David Ovens has suggested, companies need to be able to choose which route they want to go down to get the growth that they are looking for. Skyscanner, which I know some of the committee have visited, had every option in front of it—after all, it is a very successful company—and it chose to do the deal that was right for its growth. I do not think that we should look at acquisitions necessarily as bad things—although sometimes they can be.

At Scottish Enterprise, we recently did some follow-up research to our work in 2015 on acquisition and its impact, and we looked at how Scotland compares with other comparator nations and the wider UK in that respect. We found that we compare very similarly with others with regard to inward acquisition—in other words, the number of companies buying one of our companies—but we compared much more favourably with those that exist in and still have a big presence in Scotland. That is very positive for us. Our mechanism has allowed us to anchor companies here, which means that when they are bought by another company, we still see the benefit of the company being based in Scotland.

However, we fared worse on outward acquisition—in other words, Scottish companies buying companies from elsewhere. We want to look at why that is and whether getting more support for these outward acquisitions is another option for companies to grow.

The Convener: I see that Andy Wightman has another question.

Andy Wightman: What is going to happen to the Scottish Investment Bank once the Scottish national investment bank is set up? Can you say something about the evolving governance relations and the SNIB's relationship not just to the Scottish Investment Bank as it is currently established in Scottish Enterprise but with regard to the growth fund, which Dean Lockhart mentioned?

Kerry Sharp: In his implementation plan, which has now been published, Benny Higgins quite clearly recommends to ministers that we not only build on what exists just now in the market but do much more and that the bank bring in other things in the public sector, among which would be the Scottish Investment Bank, the Scottish growth scheme and the holding fund that was mentioned earlier. Ministers will need time to digest that and discuss the matter at Cabinet and with Scottish Enterprise and others to work out how to take all this forward, and part of those discussions will very much be about how that can happen, the

governance and everything else. I would suggest that we still have a way to go until we are very clear about what that will look like, but as you can see from the recommendations, there is a desire not only to do much more than what we do just now but to build on existing successes.

Andy Wightman: Obviously it is for ministers to decide how to proceed on the recommendations, but should there be further public consultation on this matter and a broader discussion about how this should be structured?

Kerry Sharp: There has already been significant consultation, and the different consultation documents and the discussions that Benny Higgins and the advisory board had are all publicly available. I guess that it will be for Government to decide whether any more consultation is needed, but from my involvement, I feel that there has been significant input into the process.

The Convener: As no one wishes to make a final comment before we close, I thank our witnesses very much for coming in. We now move into private session.

12:07

Meeting continued in private until 12:38.

This is the final edition of the Official R	Report of this meeting. It is part of the and has been sent for legal dep	e Scottish Parliament <i>Official Report</i> archive posit.			
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