

# Finance and Public Administration Committee

**Tuesday 6 September 2022** 



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# FINANCE AND PUBLIC ADMINISTRATION COMMITTEE

22<sup>nd</sup> Meeting 2022, Session 6

#### **CONVENER**

\*Kenneth Gibson (Cunninghame North) (SNP)

#### **DEPUTY CONVENER**

\*Daniel Johnson (Edinburgh Southern) (Lab)

### **COMMITTEE MEMBERS**

\*Ross Greer (West Scotland) (Green)

\*Douglas Lumsden (North East Scotland) (Con)

\*John Mason (Glasgow Shettleston) (SNP)

\*Liz Smith (Mid Scotland and Fife) (Con)

\*Michelle Thomson (Falkirk East) (SNP)

### THE FOLLOWING ALSO PARTICIPATED:

Claire Murdoch (Scottish Fiscal Commission) Professor Graeme Roy (Scottish Fiscal Commission) Professor David Ulph (Scottish Fiscal Commission)

# CLERK TO THE COMMITTEE

Joanne McNaughton

## LOCATION

The Robert Burns Room (CR1)

<sup>\*</sup>attended

# **Scottish Parliament**

# Finance and Public Administration Committee

Tuesday 6 September 2022

[The Deputy Convener opened the meeting at 09:30]

# Scottish Fiscal Commission (Publications)

The Deputy Convener (Daniel Johnson): Good morning and welcome to the 22nd meeting in 2022 of the Finance and Public Administration Committee. As you might have noted, I am the committee's deputy convener, but I am sitting in the chair as convener of the meeting because the convener has unfortunately lost his voice this morning. I ask my fellow committee members not to smirk or smile at that fact; indeed, I have asked the clerks to investigate whether there has been any foul play—I am not looking at John Mason in particular.

We are very pleased to have with us the Scottish Fiscal Commission, given that agenda item 1 is an evidence-taking session on the four new reports that it published last week. Members will have received copies of the "Forecast Evaluation Report", the "Approach to Fiscal Sustainability Consultation Paper", "Trends in Scotland's population and effects on the economy and income tax" and the commission's fourth "Statement of Data Needs".

Without further ado, I welcome to the meeting Professor Graeme Roy, who is appearing before us not for the first time in person but for the first time as chair of the Scottish Fiscal Commission; Professor David Ulph, commissioner; and Claire Murdoch, head of social security and public funding. I believe that John Ireland has been unable to make it, as he, too, is unwell.

I intend to allow up to 90 minutes for this session. I invite Professor Roy to make a short opening statement before I open it up to questions from the committee.

**Professor Graeme Roy (Scottish Fiscal Commission):** Thank you very much for the opportunity to come along and speak to all of you this morning.

As the deputy convener said, we published four reports last week, two in our regular cycle and the other two as the start of our work on fiscal sustainability. First, I want to give you a couple of

highlights from our "Forecast Evaluation Report" and the "Statement of Data Needs".

As members will know, income tax data is released 16 months after the end of the financial year, which means that we can now evaluate our forecast for 2020-21. Scottish income tax revenues were £417 million lower than forecast when the budget was set in February 2020, which, as you will recall, was before Covid was declared a global epidemic. Crucially, although Scottish revenues were lower than forecast, revenues in the rest of the United Kingdom were lower, too. The net effect is a positive reconciliation of £50 million, which is the first positive income tax reconciliation that we have had so far. You will note that it is more positive than the -£221 million reconciliation that we forecast in May. It is mainly due to equivalent UK tax revenues being lower than the Office for Budget Responsibility's March forecast.

As for the devolved taxes, revenues from land and buildings transaction tax were £221 million higher in 2021-22 than we forecast, largely because house prices grew faster than expected, as—crucially—did the share of residential properties in the top tax bands. Devolved social security payments in 2021-22 were £136 million or 4 per cent higher than forecast when the budget was set. It is important, though, to point out that that evaluation does not cover the new disability payments. The adult disability payment, for example, was launched nationwide only last week, and we do not yet have the data needed to evaluate our child disability payment forecast.

Our "Statement of Data Needs" highlights the need for significant improvements in the data produced by Social Security Scotland, which is essential in forecasting spending and in any evaluation of the effectiveness of social security programmes. I stress that current data limitations might result in larger forecast errors in future, with implications for the Scottish Government's social security budget. That said, there is good news. We have agreed a memorandum of understanding with Her Majesty's Treasury, which will ensure that we have access to information if the UK Government makes changes that affect devolved taxes and social security.

On fiscal sustainability, last week we published a consultation paper that sets out how we plan to approach this task. We propose a measure of fiscal sustainability that will look at the projected gap or surplus between spending and funding. To start with, we have published projections of the Scottish population and illustrated the effects on economic growth. Given trends on births, deaths and migration, Scotland's population is on track to fall in the decades to come. In the scenario that we set out last week, we estimate that nearly

900,000 fewer people will be living in Scotland in 50 years' time. With the OBR projecting the UK's population to fall by only 2 per cent over the next 50 years, Scotland's relative position of a 16 per cent fall is clearly more challenging.

Crucially, the number of 16 to 64-year-olds will fall, so there are likely to be fewer people working. Indeed, there are currently three older people for every 10 people between 16 and 64 but, by 2072, that will increase to six older people. A smaller population and fewer people working will affect the economy and lead to slower economic growth. That will have implications for future Scottish budgets, which we will explore more fully in the report that we will publish in March.

Our fiscal sustainability paper is designed to help politicians of all colours by looking at key structural challenges that we think will shape the health of the public finances in the long run, which we hope will help to pinpoint the ways in which the long-term finances might not be viable and motivate change. Ultimately, we hope that our work can assist the planning that is needed to protect the sustainability of the public services on which we all rely.

I hand back to the deputy convener for questions.

**The Deputy Convener:** Thank you very much, Professor Roy. I will ask two or three opening questions.

In broad terms, the reports examine how effective your forecasting has been to date and look forward to how it could be done in the longer term. With that in mind, and given that we know from your previous reports that there is potentially a significant gap in social security funding—a gap of around £700 million, as I recall—will you elaborate on the data requirements and the issues that you pointed out in the reports and in your opening remarks?

**Professor Roy:** It is important to distinguish between the forecasts that we do for the budget, which are for the medium term—the next five years—and the longer-term projections, which are much more about looking from a high level at the aggregate trends that we will face in our economy. For the latter, we draw on much higher-level data. We consider, for example, demographics and levels of economic growth.

The important social security data needs are about the immediate forecasts for the next five years—the medium term. We need really good data to enable us to consider how trends in the economy, take-up or eligibility will feed through to our immediate forecasts. Currently, we do not have the data that we need to be able to do that accurately.

There is some aggregate data on the overall numbers of people claiming benefits and the overall value, but we do not have robust data on average payments to individuals or by gender, for example. That has been available in the past from the Department for Work and Pensions for its benefits. We do not yet have that data for Scotland, which means that it is much more challenging for us to forecast for the next five years or so. That makes it more difficult to provide accurate forecasts.

The Deputy Convener: Obviously, you need disaggregated data on average payment type and on who is claiming what and when. That is a crude summary of what you are after. You say that you had that in the past. What is preventing you from getting that data from Social Security Scotland? Is it systems, organisational issues or some other reason?

**Professor Roy:** We engage with Social Security Scotland regularly to make our data requests. For me, the key thing is getting access to that data as soon as possible. Ultimately, the provision of that data is an issue for Social Security Scotland and the Scottish Government, so I cannot say too much about that.

I stress the importance of getting that data and, crucially, getting it now. We need to have not only the decomposition of the data to let us project forward but the time trends that go backwards, because that information is crucial to accurate forecasts. We cannot have any breaks in the data, because that makes the forecasting more difficult.

The accuracy of the data is an important challenge for our ability to forecast. It is also an important challenge for evaluating policies, because you need to examine the impact of new policies to encourage take-up or of a new approach to social security and you cannot know whether those policies are having an impact unless you know what the data tells you. Therefore, the accuracy of the data is not only an important issue for us, but an issue of broader importance for scrutiny.

The Deputy Convener: I understand, but I would like a little further clarification. Do you believe that the data is being captured, which means that the issue is simply one of accessing it, or is the issue that the new agency is not capturing the same level and detail of data that you previously expected to get from the UK social security system?

**Professor Roy:** For me, the key is asking for and getting that data. Claire Murdoch might want to talk about the engagement that she has had.

Claire Murdoch (Scottish Fiscal Commission): In our "Statement of Data Needs", we essentially split the recommendations into two

groups. One group is about data dissemination, which involves data that Social Security Scotland holds in some form but which it has not been able to make available to us or other users, and the other is about data collection.

For most of the data, the issue is to do with how Social Security Scotland is holding it or how the clients are transferring from the DWP to Social Security Scotland, and whether we will still be able to get the same data. The issue is most important in relation to disability payments. Most of those clients are on the DWP's system and will move over to Social Security Scotland. At the moment, we can access fantastically rich data from the DWP in terms of numbers of clients and those clients' age, gender, health conditions, award levels and payment amounts, which we can use to do our analysis. It is not clear how that data will be captured when those clients move to Social Scotland. Further, Social Security Scotland should hold data on the new clients who are making applications to it, but it has not been able to extract that data or make it available to us.

That covers the dissemination issue, but there is also a data collection issue around sex and gender data, which is not consistently collected at the moment. The DWP has a question on that on its application form, which means that we can use that information. People's gender is correlated with how many applicants there are or which conditions they have. That is particularly important in relation to child disability payments, but it is not clear that Social Security Scotland is collecting that data in a consistent way.

We have two sets of recommendations around dissemination and collection, and we have a number of other recommendations around ensuring that Social Security Scotland is sufficiently resourced to get the data that we and other users need. We also recommend that it set up a user group, because we are not the only users of Social Security Scotland data. It is speaking to other users, but not in a group forum.

Finally, we would like Social Security Scotland to develop a tool so that we can access the data in the same way that we currently can from the DWP, which has proved useful to us.

Professor David Ulph (Scottish Fiscal Commission): An important issue in relation to children is that we know that some types of disability are more prevalent among boys than girls, which is why it is important to have a breakdown of the data by gender. At the moment, Social Security Scotland proposes to collect that gender information through the equality impact assessment rather than through the application form itself. That poses two problems: one is that it can be quite difficult to link the impact assessment to the application; the other is that there is an

option on the impact assessment to say that you would prefer not to give the information. That means that we might miss that rather important information.

We do our forecasts at a detailed, broken-down level and, if we cannot match the data that we get on outturns to the other data easily, we find it hard to understand what errors we are making in our forecasts, so we cannot correct our forecasting methodology, and we cannot rebase our statistics on the more detailed breakdown and use that as a basis for future forecasts. That raises the prospect of significant errors in our future forecasts. Given that we are forecasting disability payments of around £3.25 billion, even small errors have huge consequences.

The Deputy Convener: Indeed. I will not ask any further questions about that, but it is clear that having access to data that is rich, disaggregated and has continuity from the legacy social security payments is critically important. I am sure that the committee will want to address that in future, and it might well be the subject of questions from other members.

09:45

I have two final questions. First—this is just to frame the evidence session—the past 18 to 24 months have been highly unusual, if I can put it like that, and have stress tested your methodology to the greatest possible extent. Indeed, I note in the "Forecast Evaluation Report" some commentary on the accuracy of employment data and your use of real-time information rather than the labour force survey, which the OBR uses. In broad terms, what lessons have been learned from the unpredictable nature of the last period? How will that inform the approach that you take in "normal times"—quote, unquote—if such times exist, and in the context of any future shocks?

**Professor Roy:** There are a couple of immediate reflections that I would make in that respect. The past 18 months have been very unusual, but the fact is that we have been living in a longer period of uncertainty. We have talked before about the changes that have taken place over the past decade and what has happened to the Scottish economy, and that period is likely to continue. As a result, forecasting is going to remain really challenging for the foreseeable future.

The forecast evaluation sets out very clearly where the errors—if we can call them that—have arisen and the changes that one might suggest have led to the numbers moving around. If we think about how the fiscal framework works, we see those common shocks across the UK working through not just in the reconciliations; our income

tax forecasts, which were made before Covid hit, were out by more than £400 million, but the OBR's forecasts were out, too, because it had also underforecast. That shows that the fiscal framework is working, because the block grant adjustment and the taxes are clearly operating. That is my first reflection on the broader question of the operation of the fiscal framework.

As for the specifics of the forecasting, David Ulph might want to come in on this, but with regard to the data that we are using to forecast employment, the difference between using RTI and the LFS and the potential for slightly different variations in that respect, we think that the RTI data is a much better source for Scotland. It is a much richer data set and contains much more information, but how that translates to what the OBR does with the LFS is an issue that we might want to look at.

Over the past few years, there have been changes in the methodology for forecasting the economy and how all of that feeds through to the various tax forecasts, with the use of a model that is much more bottom up and much more informed by the years of experience that the Fiscal Commission now has in forecasting the economy and taxation. The models are becoming more refined and sophisticated, but they are also much more attuned not just to what is happening in the Scottish data, but to the differences with past forecasts. As a result, there have been some modelling improvements, and there is also a better understanding of the data.

With regard to social security, we have touched on the challenges, particularly with the data. Coming back to our previous conversation, I point out that a lot of the social security payments that we have been making forecasts on have arguably been easier to forecast, because they are based on entitlement to other benefits. As a result, there is a much greater understanding of who is eligible. The challenge comes with the move to disability payments, because they have less of a connection with other benefits. The potential spread of error becomes bigger, which is why the accuracy of the data is really important.

I think that David Ulph and Claire Murdoch want to come in, but I would say that there have been significant improvements in the data over the past five years, which can be used to inform the modelling. The models are also becoming more sophisticated, which means that we are able to understand what is driving the errors. The big thing, though, is our plea with regard to social security data, because that will be an important issue over the next few years.

**Professor Ulph:** One thing that we have learned over the past few years of analysing our income tax forecasts is that there is a big

difference between what is driving average earnings in the rest of the UK and average earnings in Scotland. We think that that is largely down to what is happening in the financial sector in the south of England, with the levels of bonuses that are being given out there not materialising in Scotland.

We have to face the question of whether we build into our understanding of future forecasts the that we are now systematically underperforming relative to the rest of the UK with regard to average earnings, and in some sense correct for that, because the difference between what is happening in the rest of the UK and what is happening in Scotland with regard to earnings, and hence income tax, drives some of the reconciliations. Because we have learned about that difference, we can now start to think about how to correct for it systematically in future forecasts.

The Deputy Convener: You touch on a really important facet, which the committee has had a real interest in when we have looked at the reports of the past year.

I have a brief follow-up—I am mindful of the time, colleagues. To what extent does the long-term fiscal sustainability report seek to understand and explain some of those long-term trends? It is one thing to observe and forecast them correctly, but as policymakers, we want to understand why they are happening, so that we can make policy decisions to address them. To what extent will the report seek to explain the sort of differences that you have just outlined?

**Professor Ulph:** I will pick up on some of the factors. One thing that we have observed in Scotland is that participation has fallen, relative to the rest of the UK. That trend is partly driven by long-term demographic factors—we have more and more elderly people in the population, and that will have a big impact on participation in the economy. Our long-term projections will pick up on some of the factors that drive some of those differences between Scotland and the rest of the UK.

We will not be able to pick up on all the factors that drive those differences in the long term—that was precisely one of the motivations for doing fiscal sustainability reports. When we do our five-year forecast, there are many moving parts and many things change around, so it is quite hard to see what the long-term drivers are that are behind some of those changes.

The aim of our fiscal sustainability report is to say that if we can take one or two of those long-term drivers—of which demographics are an important part—and push them forward while holding other things constant, we can start to see

the long-term impact of those drivers on the sustainability of tax and spending programmes.

**The Deputy Convener:** I hand over to my colleagues Liz Smith, followed by John Mason, to ask questions.

Liz Smith (Mid Scotland and Fife) (Con): Professor Roy, I was interested in what you said about the issue around social security data. Do any other aspects of the data collection cause you any problems? You said that data has improved in many areas, but do you need any other aspects of the data besides social security?

**Professor Roy:** The first thing to note is that we have made several statements of data needs over the years and there has been welcome improvement in the quality of the data information that the Scottish Government and HM Revenues and Customs provide, which has helped to improve the accuracy of the forecasts. We can always do with better data, including employment data, and improvements to RTI and access to data over years, so that we can start to consider the impact of policy changes.

In the "Statement of Data Needs" document, we set out other areas of data requests on the economy and tax and improvements that we would like to see with regard to how the Government uses productivity data, which is ultimately crucial for our gross domestic product forecasts.

Social security data is the most pressing issue at this point, for two reasons: the first one concerns the lack of clarity and information in order for us to be able to do projections; and the second one concerns the scale of the social security payments, which are very large—as David Ulph said, small errors on a very large number can lead to significant numbers moving around.

Liz Smith: That is helpful.

Claire Murdoch mentioned the issues around the consistency of the social security data. Can that problem be fixed quickly? Were you surprised by its extent? Historically, the DWP has had better data than Social Security Scotland, albeit that it is a new body. Can that be solved so that there is consistent data? As Professor Roy rightly said, it is absolutely essential that we get that fixed, given the scale of what we are talking about.

Claire Murdoch: Most things are solvable if they are prioritised, so Social Security Scotland would need sufficient staff and it would need to make solving that issue a priority. At the moment, the agency is delivering payments to clients, which is, arguably, the most important thing, but how it collects and disseminates the data on that has important consequences for our role and for the Government's budget. The problem is not at all

unsolvable, but it is important that the data is backdated to when the payment started being administered.

Liz Smith: Therefore, are there really two issues? You have some concerns about the resources that are required to go into solving that problem. Is there also a specific issue about the consistency of the data? Do we need to do more to align the data that the DWP has had with the data that Social Security Scotland has? As well as solving the resource problem, does a methodological alignment need to take place?

Claire Murdoch: Ultimately, that information comes from administrative data, so it should be similar and consistent. In order to administer the payments, both agencies need the same information about who they are paying, how much they are paying them, why they are paying them and what their award amounts are. Both agencies should be holding that information, which we can currently get from the DWP. Apart from the issue around sex and gender, which we have spoken about, our understanding is that the rest of the problem is more about the dissemination of that information than about its collection.

**Professor Ulph:** There has been a perception that it is not a lack of resources in the sense of there not being enough money in Social Security Scotland. The agency is just struggling to recruit the suitably qualified staff to help it to marshal that data and put it into the form that we need. The lack of resources is more on the supply side than on the funding side. Social Security Scotland has the funds to solve the problem.

**Liz Smith:** Therefore, that is a particular worry.

Professor Ulph: It is.

**Liz Smith:** Professor Roy, my question is in relation to the recent problems in the census and the collection of data. As well as all the other obvious aspects of collecting relevant data for economic forecasting, to what extent has the lower rate of response to the census affected your forecasting work?

**Professor Roy:** The census is, ultimately, crucial for a large part of the data on population that we use. Obviously, it will be really important for us to see the census data and—crucially, from our perspective—information on the level of confidence intervals around the data. I probably cannot say too much on that until we actually see and hear from National Records of Scotland about potential confidence intervals, particularly around people who might be in receipt of benefits and things like that, which will be important. The census is obviously crucial to what we do, so having that information and, subsequently, having a dialogue with NRS, will be really important for us.

**The Deputy Convener:** Thank you, Liz. We turn to questions from John Mason.

John Mason (Glasgow Shettleston) (SNP): Thank you, convener. You are convening the meeting, and there is a debate over that, but I will try not to make any jokes about it.

I will start by returning to the "Statement of Data Needs" document, because that interested me quite a lot. Towards the end of the statement, on pages 28 and 29, there is an annex on previous requests. The document says that some of the requests are "in progress" and that some have had intrigued by those "no progress". I am descriptions, which could mean quite a lot of things. If the document says, "in progress", are you broadly happy that things are moving ahead, albeit slowly? For example, I take the point that a statutory right to access to information from UK Government departments may end up being part of the fiscal framework, so in that case there is a timetable. Some of the "no progress" ones such as VAT are not urgent. Are you broadly happy with the position?

#### 10:00

**Professor Roy:** There are a couple of things to note. "In progress" could mean that we are engaging with UK Government departments on the data. "No progress" could mean that we do not actually have any information, but that is not to say that the work is not being undertaken. Broadly speaking, we are making good progress on a lot of the data aspects. I come back to the point about social security, which is the key bit.

What the document does not do—we could reflect on the issue of the scale of these things—is say, "This is what we have asked for. This is how it is progressing." Some things will be really important, some things will be less important and some things will refine our estimates, but in general, there is a lot of progress across the board.

John Mason: Fair enough.

**Professor Ulph:** The memorandum of understanding that we have signed is important, because when we talk about data, there are different types of data; there are numbers, but there is also information about possible policy changes in the future. The memorandum of understanding will make sure that if there is thinking going on inside the UK Government that could have implications for Scottish taxes and spending, we will get access to the earlier thinking that we have not been getting until now. That is a very definite step forward.

**John Mason:** That is helpful. As I understand it, you are not planning to produce another report like

this for two years. Given that you think that some of this is urgent, could we at least have an update before two years? Why two years?

**Professor Roy:** The reason that we did not update the report for two years is largely because there was not much to update. We would be particularly keen to keep updating on the social security stuff, given the importance of that for the committee's work. We can take that as an action to provide an update. We can look at whether to produce a full statement of data needs, but I am more than happy to commit to update the committee on progress.

**John Mason:** That is great. The committee will be interested in pursuing that within two years.

Moving on to social security, I was interested in some comments in your report. Paragraph 2.7 states:

"However, the new systems used by Social Security Scotland are currently not designed in a way that meets or prioritises our, and other users' data needs".

It has been suggested that there is a lack of resources, but if the systems have not been designed in the right way, that suggests that the problem is not a lack of resources but a lack of foresight or consultation earlier on—which is it?

Professor Roy: There are a couple of things to say. First, I come back to Claire Murdoch's point about the way that the data is collected and disseminated. Within that, the dissemination of the data and the systems that are there to disseminate the data are crucial. For example, the DWP has an accessible statistical tool that lets us have the information that we need to do bottom-up estimates of eligibility to criteria. It is a key part of the system that lets us go in and do those calculations. However, that key bit of the system does not yet exist here, but it is important that it is produced, so that data is accessible to people.

Claire Murdoch: There are also steps behind that in Social Security Scotland. In the DWP, the data is taken from the administrative system and put into a statistical form that the statisticians can use to put into that tool, which we can then use externally. It is our understanding that Social Security Scotland statisticians are not getting all the data for those steps. It is not that they are getting the data and not sharing it; they are not able to get the data from the systems, but that does not mean that it is not held in some form.

**John Mason:** Would you say that those are teething problems, or is there a more fundamental issue? Relatively speaking, Social Security Scotland is still a new body and the DWP has been going a long time.

**Professor Roy:** I cannot really comment on the specifics of the operations in that regard. I come

back to two points. Whether it is teething issues or something more substantial, it is not only important to get the data, but crucial to get data that gives us consistency over time: first, to look at the forecasts; and secondly, to evaluate the policies.

John Mason: Terminal illness is mentioned as a specific issue—Social Security Scotland did not have the number of people who were getting a payment because of terminal illness. I would have thought that that number would be quite essential. Is that because Social Security Scotland has not collected that information, or is it because it has not worked the information through the system yet?

Claire Murdoch: Social Security Scotland should have that information, because if someone has a terminal illness, they qualify under special rules for these payments, and Social Security Scotland will be making the payments on that basis

Again, that information is held somewhere in the system but is not extractable in the form that we need. At the moment, with the data from the DWP, we can tell whether somebody is a new client on PIP, whether they are under special rules for terminal illness or whether they were reassessed from disability living allowance. There are different categories of people, and the trends that we see in those groups are very different, because they are naturally different types of clients.

There are a lot of different sub-groups, which makes the disability payments a lot more complicated for Social Security Scotland to administer. The scale is different from what it was doing for the other payments, but it also means that it is a lot more difficult for us to forecast, evaluate our forecasts and then, ultimately, try to provide the best forecast that we can for the Scottish budget.

John Mason: The issue of sex and gender has been mentioned, which is quite a hot political issue. Am I right in understanding that your view is that, in relation to older people—adults—it does not really matter quite so much? I would have thought that it would be a factor that, generally, men die younger than women, because, if women claim benefits for longer, there will be a greater cost. However, from what Professor Ulph said, among children, there are specific conditions that boys have that girls do not have, and vice versa. Is it mainly children that you are focusing on for data on sex and gender?

**Professor Ulph:** We do not know, because conditions may emerge in future in the elderly population that turn out to depend on gender. If we do not have the data, we cannot even do the analysis to understand whether that is the case.

Even if something does not look like an issue at the moment, it could become an issue, so it would be better if we had the data to understand whether it is an issue and use it for future forecasting.

**John Mason:** Maybe you cannot answer this, but do you have any idea whether that is a political decision, because we are not wanting to emphasise sex so much nowadays, or is it the case that Social Security Scotland has not thought about differentiating in collecting the data?

Claire Murdoch: It is ultimately because of the application form. Social Security Scotland wants to capture the information that it needs to process a claim. It does not need to know somebody's gender in order to process a claim, which is why it is not collecting that information on the core application form.

**John Mason:** In paragraph 2.49 on page 14 of the "Statement of Data Needs" document, you say:

"We would like early engagement with the Scottish Government on data requirements for these payments."

Is that improving?

**Professor Roy:** Claire, you are the one closest to the engagement.

Claire Murdoch: We have had regular conversations with the Scottish Government over the past four years about our data needs. However, what we can see now, with the data that it is collecting on disability payments, is that there are real issues for us. We want to continue those conversations, particularly where the Scottish Government is in the process of designing the new system, to ensure that the systems for the payments that have not yet launched are designed in a way that makes it easier for Social Security Scotland to get us the data that we need.

**John Mason:** Finally, paragraph 2.55 mentions the accounting treatment of PIP. That kind of jumped out at me, as an accountant. I am puzzled about the importance of the accounting treatment or why there was an issue there.

**Professor Roy:** I am just trying to find that paragraph.

**John Mason:** I would be happy enough if you wanted to come back to me on that.

**Professor Roy:** The broader issue that we were picking up on is the difference between the financial data that we collect at the end of the process and the statistical information that we have in order to make the forecasts. Historically, there has always been a gap between that accounting information—the financial data—and the statistical data that we use. What was interesting this time was that the gap was bigger than it had been in the past. For the next round of

forecasts, we need to understand that and reflect on whether that gap is going to close.

Professor Ulph: I would like to elaborate on that. The issue arises when somebody makes a claim around which there are some issues, which means that there is a delay before the claim is finally signed off. The person making the claim will therefore be entitled to back payments, so, when their claim comes through, they will receive that money. However, all we get are the numbers of people who are claiming and who are entitled to certain awards, which means that when we forecast the number of people who will get awards and the amounts that they will get, we are not necessarily picking up on all of those back payments. That is where the discrepancy between the fiscal and the statistical data comes in.

The problem seems to be a lot greater for disability benefits, for obvious reasons. If someone has a disability issue, it might take longer to fully assess and validate their claim. That will make it more likely that their claim will involve back payments, which means that the error in that regard might be somewhat higher.

**John Mason:** That was helpful—I think that I understand that.

I would like to touch on what the population report says about earnings. In paragraph 4.19, it says:

"We have seen Scottish average earnings grow more slowly than in the UK over the last five years."

However, it also says that your assumption is that they will

"grow broadly in line with average earnings in the UK."

Why do you think that there will be a change? Is that not over-optimistic?

Professor Roy: One of the things that we are trying to do in the fiscal sustainability report is separate out the different factors. In the report you quote from, we are looking at population projections-that is the core bit that we are pushing forward. We are looking at our stock of population at the moment, making some reasonable assumptions about migration and asking what we can say about the impact on the economy and, ultimately, the public finances. However, that is one issue in isolation, and we must consider other issues, such as potential earnings; indeed, we have spoken about that in terms of participation rates and the strength of some sectors in Scotland, such as energy and financial services, relative to the rest of the UK, and how those might impact on our long-term projections.

In the population paper, we essentially make the easiest assumption, which is that productivity,

earnings and so on will be the same as they are in the UK, and we change only one element, which is the population. That will be our approach more broadly for a lot of our fiscal sustainability work; we will not try to throw everything in the mix and come up with a number that generates good or bad headlines. Instead, we will take an issue, such as our ageing population and demographic change, and say how it could impact on the economy and, therefore, the public finances. We will examine an issue—economic performance, climate change or whatever our consultation suggests that people want us to look at-and trace the impact of that on the long-term public finances, so that people can understand what the key issues are rather than what one particular number is.

Ross Greer (West Scotland) (Green): I would like to pick up briefly on Claire Murdoch's explanation for why certain points of detail are not collected in the social security application process, which was that they are not necessary in order to process the claim. I will caveat my question by saying that I accept that you are not Social Security Scotland, so you might not know the answer—that is fine. I assume that the reason why Social Security Scotland is not asking questions as part of the application process that would otherwise provide useful bits of demographic data is that the more fields that are on the form, the more people will drop out of the application process. Is that the case?

**Professor Roy:** That is a good question. There might well be an issue with longer forms in the way that you have suggested. I guess that there will be issues around what the agency is trying to do with the form and what data it needs to process, but not collecting that data has consequences for people's ability to evaluate the process and make forecasts.

This is not a question that we can answer—it is a question for Social Security Scotland—but the outcome is that not collecting that data makes it more challenging to make forecasts.

10:15

Ross Greer: It might be worth the committee getting in touch with Social Security Scotland about that.

My main line of questioning is about your consultation process. I am interested in how you will go about that in the fiscal sustainability review. Examples of priority areas that you mention are the climate and health inequalities, which are spaces that have pretty robust third sector organisations in them. Have those organisations engaged with Fiscal Commission consultation processes in the past? Do you have an established relationship with such groups, or are

you taking a new approach in order to achieve a wider level of engagement?

Professor Roy: That is a really good question. One of the reasons why we focus on demographics is that it is probably the area that the most is known about how it might impact on the economy and the public finances. It is also the area where, as commissioners and as a team in the commission, we have the greatest understanding and the strongest links with stakeholders. Our understanding of how climate change will impact on the public finances in the long run is still in development. Indeed, the OBR published its first report on the subject last year—that was its first attempt to look at such matters.

We face an important learning curve when it comes to understanding how issues such as climate change will impact on the economy and the public finances. A key part of that process is working with stakeholders. It is a new space for us to work in, and we need to think about who the key stakeholders are and whether they are third sector organisations, climate experts, academics or people in other organisations, such as the Climate Change Committee and the Scottish Government. We need to understand their work and how the impact of climate change might feed through to the economy and the public finances. It is a big area for us, and part of the work that we need to do is about the stakeholder network that we engage with.

Ross Greer: What will the engagement process with stakeholders look like? That leads me into a wider discussion that the committee has had in the past, which is about public and stakeholder understanding of our public finance landscape, and the extent to which it is important for certain stakeholders to have a greater level of understanding of devolved public finances than is currently the case.

I will probably get a row from all my friends in the climate movement for saying that, in all the relatively well-funded third sector organisations in that space, I do not think that there are many people who have a depth of understanding of our public finances. Historically, that is not an area that those organisations and campaign groups have focused on. However, it is probably important that we get their input into the process. Whether we are talking about climate organisations or the alliance of healthcare organisations—which might be in a slightly different position but is probably in roughly the same place—will part of the process involve your assisting and enabling them to give useful feedback?

Professor Roy: David Ulph can go first.

**Professor Ulph:** I will elaborate on that. In relation to demographics, there are well-

established organisations that produce data on future demographic trends. In areas such as climate change, we need to find organisations that can give us the same level of confidence that we have on demographic data on what the evolution of climate change is likely to be from the point of view of its impact on Scotland. I am talking about issues such the impact on flooding, fires and coastal erosion that will matter in forecasting the resources that will be available to the Scottish economy.

There are other big issues there, too. For example, if we are to adapt to climate change, to what extent will that be done by individuals spending money on it and to what extent will it be done through the state supporting individuals to do it? We need to have some understanding of the likely policy programmes in those areas in the future.

There is quite a lot that we need to understand, so we intend to build relationships with organisations that can help us understand those dimensions. We will try to translate some of that into the implications for funding in Scotland, and we will need to build a relationship with other groups outside the SFC in order to develop a core level of competence around what the evolution of climate change in Scotland, in particular, is likely to be.

Ross Greer: I am interested in what that will look like. I presume that a punter can go to the SFC's website, fill in a consultation form and answer the questions there. However, if you are trying to get greater depth, particularly from those key groups with which you are engaging for the first time, what will that work look like? Will it involve workshops, seminars or one-on-one meetings?

**Professor Roy:** It will be a mixture of both. Once we start the climate change work, a key aspect will be the development of a stakeholder plan, for the exact reasons that you mention. We will look at how we communicate that such engagement is important, not only for having an informed discussion around climate change and for understanding the implications—good and bad—for the public finances, but for the SFC itself. After all, we need that information, and we will look at how those groups can provide input to the SFC.

We have great links on the public finances and economy side, because that is what we do. Next week, I will be talking to the Society of Local Authority Chief Executives and Senior Managers; indeed, we have regular engagement with it. We do not have the same engagement on climate change, so a key task for us will be to go out and see what the key networks are and to work with the Government and other organisations on getting those networks. We then need to think

about the best way of engaging, whether that be through workshops, seminars, speaking at events or so on. All of that will be really important to us.

Ross Greer: I have one final question, on a different note. You mentioned this at the start of the session, but much of your written submission is about improvements in data and process that should improve the accuracy of forecasts. On the flipside, given that inflation might top 20 per cent and we are entering an indeterminate period of profound economic instability, should we be expecting greater accuracy in forecasting in the immediate future? Are those improvements going to pay off in five or 10 years' time once we are on the other side of that instability?

**Professor Roy:** I would separate out two things. First, the better the information and the more accurate data we can get, the better the forecast will be, all else remaining equal. That will make forecasts better both in the short term and in the long term.

Secondly, with regard to our current situation and the uncertainty, the past 18 months have been quite eventful for the economy, and it is clear that the next few years are going to be eventful, too. That means that the noise in the system is going to be that much louder, which will make getting accurate forecasts and the process of forecasting much more difficult. We need look only at the variations in forecasts of inflation over the past six months to see the huge change that has happened in a relatively short period of time.

The more data and the better the information we get, the better and more accurate the forecasts will be. I am not saying, however, that that is the only thing that matters—the broader economic climate is crucial, too.

Michelle Thomson (Falkirk East) (SNP): Good morning to the panel—thank you for attending today. If you can bear with me, I want to return to your "Statement of data needs", specifically in relation to the child disability payment. In the statement, you note—correctly—that,

"While ... sex and gender are sometimes used interchangeably",

they actually meet different data needs. You also note, as has been referenced today,

"a long-term trend in child disability ... and a higher prevalence of certain conditions for"

males. Given that you have explained today that small errors can, over time, have quite a big impact, is there not a case—if you had your preference—for data on both sex and gender to be collected specifically for the child disability payment and, where appropriate, in other cases?

**Professor Roy:** The general point is that the greater the breakdown we have, the more

accurate the forecasts will be. The quality of the information is going to be crucial for our forecasts. The more information we have on that area, the better. Claire Murdoch might want to come in on the specifics of the split.

Claire Murdoch: In general, more data is always better. In this case, we do not believe that what you describe would make a significant difference to our forecasting capacity; what is important is that the information is collected in the most appropriate way. We are not responsible for that data collection, so we will leave it to Social Security Scotland to decide whether it should ask the question in relation to sex or to gender. We note the chief statistician's recent guidance on that, but what is important for our purposes is that the data on that form is collected, because it would greatly increase the information that we can use in relation to population projections. However, it is up to Social Security Scotland which questions it asks and how it asks them.

Michelle Thomson: What I am exploring and referencing are your data needs, not Social Security Scotland's. Given that you have pointed out a prevalence of certain conditions in males, surely the only way in which you can have data accuracy is by requesting and collecting sex and gender data. I am taking particular account of Professor Ulph's point that there might well be conditions that we are not yet aware of but which we might find occur only in males when we look at their sex and immutable characteristics instead of their gender. After all, we can all foresee a time in which gender is much more fluid. I am therefore asking about your specific data needs rather than what is, as Mr Mason has called it, a hot political topic. If you had your choice among your data needs-and given what you have said about separating them out-would you prefer to have sex and gender data where they are specifically relevant to, say, the greater prevalence of certain conditions?

**Professor Roy:** I just want to re-emphasise what Claire Murdoch has said: it does not really matter with regard to the forecast, as long as we have the information in some form. That is the most important issue as far as the overall accuracy of the forecast is concerned. I am quite relaxed about what Social Security Scotland gives us, as long as it gives us a breakdown that allows us to do the forecasting.

Michelle Thomson: I want to ask about the equality form. I am very interested in data accuracy, too, but it seems to me that room for error is almost being built in here. Obviously it is inefficient to have, with the child disability payment, a two-step process in which you have to join data fields. Is that your view, too? Is that why you are stating that, ideally, you would for your

data collection needs be looking to have everything on one form?

**Professor Roy:** The main thing about the equality monitoring form is the response rate and then the accuracy in that respect. If it is more administrative—that is, if it is more a matter of collecting it as part of the system's processes—it will be more accurate. As we know, if the form is voluntary, the response rate will be much lower, and therefore there is potential for much greater error. Building it into the administrative data side of things will make it much more accurate. As I have said, our key concern about the form is the likelihood of a lower response rate.

**Michelle Thomson:** Does having other people fill in the form pose any further risks with regard to data?

Claire Murdoch: The challenge that we have with the way in which the child disability payment application form is set up is that it asks for the characteristics of the person completing the form, who will most likely be a parent or guardian rather than the child. That is quite a fundamental issue for us, because for our purposes the parent's characteristics are not likely to have a bearing on the application whereas the child's characteristics will.

Beyond that. I would say that, although the data collection issues are important, the issue of dissemination and the availability of the much more administrative data on, say, the number of awards, how much people are receiving and so on are much more important. If Social Security Scotland decides not to collect that information, we can still produce our forecasts. It might have implications for their accuracy, but the scale of the impact of that issue is not as significant as that of understanding the overall client base, why people are receiving an award, how much they are receiving, the average payments and so on. Those are fundamental issues. Although this issue is important, it is not as fundamental to our forecasting ability.

**Michelle Thomson:** I also want to talk to you briefly about your fiscal sustainability consultation paper. I can see that you are already making strenuous efforts to get contributions; indeed, I saw your piece on LinkedIn, Professor Roy. As you set out, it is an odd set-up. You comment that Scotland does not have any debt and you are trying to model something that is quite odd to people looking in from the outside within the UK.

You mention that there are a number of risks, such as that the data that is contained in the paper will be taken by either side of a polarised debate and used to prove various things that are not true at all. We have already seen that for "Government Expenditure and Revenue in Scotland", which is

largely discredited by serious economists such as Professor David Simpson.

What risks do you see? Are you, by attempting to take this approach, laudable though it is, simply embedding those risks? In other words—this is the million-dollar question—how on earth can you project fiscal sustainability on the basis of fiscal transfers in Scotland?

10:30

**Professor Roy:** To be clear, we are considering the fiscal sustainability of the Scottish budget under the current constitutional settlement. That is important, because understanding what factors will drive that relative performance is of relevance and importance to everybody in the Parliament.

Our work is very much about the current constitutional settlement and what the key factors are. That is not to say that the factors that we are talking about will not play into broader debates about constitutional reform, for instance. I am relaxed about that, because the issues that we highlight in our work are crucial to the long-term projections on sustainability and options for Scotland in the future.

We know that Scotland's population structure has been shaped over the past 100 years and that it will shape Scotland's economy over the long run, irrespective of the constitutional settlement. There is a debate to be had about what might be done about that. We hope that, by providing accurate information and discussions about population projections, our analysis helps to improve the quality of that debate.

The point about sustainability within the current constitutional settlement is important, because it allows us to ask what might drive the relative difference between Scotland and the UK as a whole. We then have to ask what drives the sustainability of the UK as a whole and how that might feed through to Scotland. If we have an ageing population across the UK, that will have implications for the Barnett block grant and overall tax revenues. We also have to ask whether climate change will have an impact on the UK and Scotland.

Those are factors that are shared across the UK. What is important under the current settlement is how Scotland might do on those issues compared to the UK as a whole. For me, the most important point is that, irrespective of the overall funding envelope, the work will show where the spending pressures are. An ageing population means that, even with a fixed amount of budget, there will be increasing pressures on the health budget.

We are trying to set out what the issues are rather than immediately come to a particular number about whether the economy is sustainable. That is a deliberate effort. In my answer to John Mason, I mentioned thinking about what the key issues are. If we focus on population, we think about how it might impact on the sustainability of the Scottish public finances. That is the approach that we will take on fiscal sustainability and everything else.

**Professor Ulph:** It is absolutely right to say that, because of Scotland's fiscal settlement, we do not have a measure such as the debt to GDP ratio that other fiscal institutions can use. However, in some ways, we use the most fundamental measure: the gap between funding and spending. That is what ultimately drives the debt to GDP ratio anyway. Therefore, we argue that, in some ways, by picking up that funding gap, we are isolating the important measure of long-term fiscal sustainability and that the debt to GDP ratio is, in essence, a corollary of that, rather than the more fundamental measure.

**Michelle Thomson:** I understand that. My last wee question is this: given the nature and principle of fiscal transfers, have you looked at equivalent reports from other countries on how they attempt to model them? I am aware that no other countries have entirely similar fiscal transfer processes to Scotland, but have you considered how they attempt to model that scenario in general?

**Professor Roy:** Our fiscal sustainability report covers what other countries do on fiscal sustainability. The point you made is correct in that independent nation states that issue debt typically use that approach. What we do in Scotland is relatively unique in the sense that the system sits within a model where large amounts of tax revenue are pulled from across the UK, but a block grant still makes up a significant amount of money in the Scottish budget. That is relatively unique in the context of a fiscal sustainability report.

I come back to the point that I still think that it is very important to do the report, because it frames the conversation by saying that, irrespective of whatever constitutional settlement we have in future or of other factors that might happen in the economy and so on, there are structural drivers that will come in and change the economy over the long term.

The sooner we can have a debate and discuss what we should do about those issues, the more sustainable public finances can be made in the long run and, crucially, the better we will then be able to deliver public services.

Douglas Lumsden (North East Scotland) (Con): I go back to the projection of a 16 per cent

fall in Scotland's population compared with a fall of only 2 per cent in the rest of the UK—I think that that is what you said, Professor Roy. You also mentioned the analysis that you have done on how that could impact the economy, but I guess that that is done based on the powers we have at present. The committee is considering additional taxes, powers and devolved finance—as Ross Greer mentioned. Has any analysis been done that could inform the committee, as it considers those additional powers, on what that demographic change will mean to the Scottish economy in future?

In the past, we have discussed how things such as air passenger duty, fuel duty, VAT and—potentially—pensions could be devolved. I imagine that there would be a huge impact on the Scottish economy if there were a demographic change that meant that our working population was much smaller and we had a larger number of elderly people. Do you know of any data that could help us as we make decisions?

**Professor Roy:** The general point that I will make is that we are trying to analytically show the scale of the challenge in the relative performance of Scotland and the UK. We did not say that that fall will happen; we said that if you take our population now, look at recent trends in migration and at Scotland's track record in outmigration over a long period of time and discuss how we can attract people to Scotland, and if you make some broad assumptions about how we think the economy will perform, you can show the relative scale of the challenge that is coming down the line. By doing that, we hope to do exactly what you alluded to, which is to ask what we can do to address that challenge.

Doing that will involve discussion about the prioritisation of public services in the long run, but it will also be about how we could change the nature of the structure of our economy, which includes how we can cope with a smaller population or a slightly older population and also how we could attract more people to come to Scotland and how we can grow our economy quickly and improve productivity. All those things will start to improve our economic outlook.

The purpose of the fiscal sustainability report is to take a certain issue, such as population change, and set out what its impact will be on the economy. That is not to say that it will happen; instead, it puts the ball back in the court of policy makers to ask them how to address it—how do we attract more migrants to Scotland, what do we think about migrants from the rest of the UK coming to Scotland and how can we boost our productivity and boost our tax base? All those things could, ultimately, be much better informed using a projection that is set out in such a way.

**Douglas Lumsden:** I have another question. There is a huge difference between the population in Scotland and that in the rest of the UK. Has there always been a big difference historically, or is that a new thing that has been coming through in the past few years?

**Professor Roy:** There is a long history to Scotland's population and its demographics. Pretty much throughout the 20th century, the natural growth in Scotland's population was offset by outmigration—we were a nation that exported people. For most of the second half of the 20th century, Scotland's population did not increase. That was in stark contrast to the populations of most European countries, which had positive growth. Scotland has a long history of such challenges in population.

The position more recently has been more positive. Over the past 20 years or so, and particularly after the accession of eastern European countries to the European Union, international migration increased, as did rest-of-UK migration. When those effects were combined with the birth rate—even though that was lower—they helped boost Scotland's population.

One of the big things that it is important for us to have a conversation about as a country is what we might do about our demographic projections. If we have an ageing population, what we can do on things such as the birth rate is relatively limited, but things can be done to encourage as much natural growth in the population as possible. If the workforce is ageing, there are questions about how we encourage people to participate in the labour market for longer as they get older and about how to make Scotland an attractive place to come to for living and working. The demographics bit has been around for a long time, and dealing with it will be crucial.

**Douglas Lumsden:** You mentioned the issue of when people retire. Is there a big difference in that between Scotland and the rest of the UK?

**Professor Roy:** There are differences in the participation rate, which tends to fall as people get older. The rate as people get older has a slightly bigger fall-off in Scotland than in the rest of the UK, but whether that will hold going forward is one of the big unknowns. From a policy perspective, the question is what to do to encourage more older workers to remain in the labour force for longer.

**Douglas Lumsden:** I guess that the Government needs to come forward with policies to encourage participation and increase the rate.

**Professor Roy:** Very much so. When policy making is under lots of short-term pressures—with people thinking about what to do in the next year to 18 months to support our economy—it is right

for the vast majority of the focus to be on that, but I would argue that the value of the reports lies in thinking in the long term about how we boost participation, change our skills system to encourage older workers to remain in the labour force and have more flexible working practices that let people work for longer as they move through the age profile. All those things might not have an impact in the next year to 18 months, but they will have an impact in the decades to come.

**The Deputy Convener:** I thank Douglas Lumsden for not asking the follow-up question about what could be done to boost the birth rate.

As we have a few minutes left, I will ask two follow-up questions. First, on fiscal sustainability, the variable that you look at is population change. Your paper shows that the change in the population shape from an upright pyramid to an inverted one will not be smooth—for example, the data shows a glut of 30-year-olds. To what extent does that complicate projections? How feasible is it for you to do as consistent and isolated a forecast as possible when the change in the population is not linear?

**Professor Ulph:** The answer is that demographics are complex, because how they move forward depends both on the total population and on its distribution. With the long-term effects that we might look at, demographers will tell you that some play out over 50 to 100 years.

The precise distribution matters quite a lot when we are thinking about what will happen to the population. We are trying to take that one level further, by considering what effect it will have on participation in the labour force; we have to translate the effect on population into the effect on labour market participation. Then there are all the other effects on the economy that we have to factor in, such as unemployment and productivity. We are trying to strip out some of those factors and focus very much on the demographics that are driving things.

#### 10:45

**Professor Roy:** The important thing to realise is that these are projections, rather than a forecast—we use language carefully. It is very much about taking aggregate high-level numbers and pushing them forward.

The deputy convener is right, in that there will be bumps in how the economy evolves over time. What we are trying to say is, "Look, if average international migration into Scotland has been 20,000 over the past X years but the numbers fall off post-Brexit and because of changes in migration policy or whatever—okay, the figure might be higher in one year, but it might be much

lower or even negative—or if our population age profile continues to increase and we do not change participation rates as people get older, this is the effect that those things might have on Scotland's economy." Individuals might work a bit longer or a bit less, depending on what happens to savings and pensions, but the key thing that we are trying to highlight and showcase is the overall trend over 50 years.

The Deputy Convener: I was struck by the regional breakdowns in the forecast that you produced in early December, which were extrapolated from Office for National Statistics data. I am thinking in particular about the breakdowns for growth, employment, earnings and total tax take, in which you showed Scotland's position relative to not just RUK—although the position relative to the other devolved nations is important—but regions of England such as the north-east, the north-west and the south-west.

However, you have not replicated that approach. I was told that I could do so by going to ONS; I tried, but it was a bit beyond my data-analysis skills. To what extent will that regional breakdown form part of your presentations, ongoing analyses, forecasts and longer-term work? It strikes me that comparisons with RUK and comparable parts of England are useful as we grapple with issues of demography, productivity and growth in the economy.

**Professor Roy:** Let me say two things about that. Obviously, our main forecast is on the aggregate Scottish figure and the public finances—that is what we do in our medium-term forecast—but it is important to have an understanding of what might be driving the numbers on a regional or sectoral basis. David Ulph mentioned London and the financial services. If the financial services have a very good year and there are large bonuses in the city of London, that will have an effect on the Scottish budget in relative terms, because the growth in UK earnings is in the block grant adjustment, although it is not going to show up in the Scottish figures. That is an important point.

Another issue is regional variation within Scotland. In our December report, I think, we covered variations across Scotland and, in particular, what has been happening to earnings and employment in the north-east of the country over the past few years, given the changes in oil and gas.

An understanding of variations within the UK and how they might have an impact—and, crucially, variations within Scotland—can feed through to the long-term projections. For example, the oil and gas and energy sectors have been a really valuable source in Scotland's economy over the past 50 years and have contributed to

Scotland doing relatively well in the UK as a whole, and we know that we will have to position away from them over the next 50 years. How do we do that? It is about not just the environmental point of view but, in the context of projections about the economy and public finances, the implications for creating high-value jobs and high earnings that will, in turn, feed through to tax revenues.

Thinking about what might be happening in the regional and sectoral structures of our economy will be crucial to those projections. It will be important to unpick all those different elements and consider how they feed through to long-term projections. What we have done so far on population is very much at the aggregate level, but when we start to unpick some of the variations in economic performance, we see that they too have an impact on long-term performance.

**Professor Ulph:** We tend to use regional stories to understand what is going on in the data, rather than as the basis of our modelling; as Graeme Roy has said, our modelling is done at the aggregate level. However, sometimes we want to understand better why something is coming out in a certain way. That is why we have started to dig down much more into the regional data and present that in our reports—to provide some context to and understanding of why we are seeing certain trends in the aggregate data.

**The Deputy Convener:** Indeed. I found that approach quite illuminating in your December report.

That draws our questions to a close, and I thank Professor Graeme Roy, Claire Murdoch and Professor David Ulph for their—as ever—enlightening contributions. That concludes the public part of the meeting, as we agreed to consider our work programme in private.

10:50

Meeting continued in private until 11:06.

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