House of Commons

Treasury Committee

Oral evidence: Regional imbalances in the UK economy, HC 219

Wednesday 30 October 2019

Ordered by the House of Commons to be published on 30 October 2019.

Watch the meeting

Members present: Mel Stride (Chair); Mr Steve Baker; Alison McGovern; Alison Thewliss.

Questions 1-70

Witnesses

I: Darren Morgan, Director of Economic Statistics Development, Office for National Statistics; Rob Kent-Smith, Deputy Director of National Accounts Coordination, Office for National Statistics; Ed Humpherson, Director General for Regulation, UK Statistics Authority.

Written evidence from witnesses:

- Office for National Statistics

HOUSE OF COMMONS

Examination of witnesses

Witnesses: Darren Morgan, Rob Kent-Smith and Ed Humpherson.

Chair: Good afternoon, everybody, and welcome to the Treasury Committee's first evidence session in our inquiry into the regional imbalances in the UK, with the Office for National Statistics and the Office for Statistics Regulation. Gentlemen, could you introduce yourselves to the Committee, please?

Darren Morgan: I am Darren Morgan, director of economic statistics development at the Office for National Statistics. That means I am responsible for the transformation of the official economic statistics. I am also responsible for the production of our UK and regional accounts and our labour market statistics.

Rob Kent-Smith: I am Rob Kent-Smith, deputy director for national accounts. That includes UK GDP as well as sub-national estimates. I also look after our regional development programme at the ONS.

Ed Humpherson: I am Ed Humpherson. I am head of the Office for Statistics Regulation, and our job is to oversee official statistics produced by the ONS and all other Government Departments.

Q1 **Chair:** Thank you very much for that introduction and welcome to the Committee. I would like to open up the questions from the Chair and try to explore whether regional GVA and GDP data can be used, for example, to identify regional recessions and whether it is robust enough as data to feature, for example, in the Government's Budget commentary and OBR documents such as the *Economic and fiscal outlook*. Perhaps I could start by asking you what the respective responsibilities and remits are of the ONS and the OSR in that context.

Darren Morgan: I can make a start in terms of our responsibilities. I see our responsibility as being responsible for producing the best statistics we possibly can on a national and regional basis and explaining them in a way that is understood by our users and also making sure that we develop them in a way that keeps them up to date and relevant. We are responsible for production and explanation; we are responsible for providing the evidence base for users like yourself and people across society.

Ed Humpherson: As the OSR, what we do is we set the standards for all government official statistics. We do that through a code of practice for statistics that the ONS and all the Departments must comply with, and then we review whether they have complied with that. For those statistics that comply in full, we designate them as national statistics and they get the "national statistic" kitemark. We confer that and then, if we have concerns about it, we then remove it until such time as the statistics improve.

Q2 **Chair:** How robust and accurate would you say regional growth statistics are compared to the national growth statistics?

Darren Morgan: Given that Rob and his team are responsible for producing the estimates, perhaps I could invite Rob to talk a bit about that.

Rob Kent-Smith: When we measure GDP, at the UK and regional level, of course we have surveys designed to capture activity at that level. We take that often as a control total, primarily because our users want the regions to add up to the UK level, because that makes sense; it is common sense. As we move down to more lower-level geographical detail, some of those sample surveys can get a little bit small, so we have to be proportionate about our burden on business in collecting data. We try to use that data to best effect. As we move down to smaller and smaller areas, you can expect that you would see some reduction in quality compared to the national level.

That said, over the last couple of years we have been working quite extensively to use more administrative data. That has the advantage that we do not have to impose a burden and cost to collect it. It also provides a much vaster picture of the economy. More recently, we have introduced quarterly measures of regional GDP. That is enabled by the use of VAT data, so tax-return data. That is something in the region of between 1.9 million and 2 million returns as part of that process. That data is many orders of magnitude larger than the data we are able to gain from our surveys, so it is a real game-changer in enabling us to produce higher-quality regional estimates that go to increasing granularity to meet user needs.

Q3 **Chair:** What are the main streams of data that go into underpinning the regional data that you develop? Where are you deriving that from? How would you categorise that if you split it down for us?

Rob Kent-Smith: It is various. In our quarterly estimates, VAT is really strong, but for some areas it will not be so good. I am thinking about how we measure things like the public sector, where we use data from Government and data about service provisions; in the financial sector we use data from the Bank of England. When we move to our more structural annual estimates—we actually think of that as the gold standard—we draw data from a much wider range of sources. That could be our annual business surveys, our surveys of households and those kinds of administrative data.

I describe that as the gold standard—we are probably leading the world here—because we measure GDP in a number of different ways and we confront those different ways together, those two main ways, with our regional data, and we are the only country in the world to do that. That kind of gives you the shape of the breadth of data sources that we use. We have so many different data sources to bring to bear that we can do that confrontation.

Q4 **Chair:** Would I be right in saying that, given those other sources, the more you disaggregate and the smaller the area you are looking at, the trickier it gets to identify what is within that area that is contributing to those particular sources of data that in turn contribute to the indices that you are producing?

Rob Kent-Smith: That is exactly right. Thinking about VAT as a stylised example, for the vast majority of small businesses, we can allocate that quite precisely, because the chances are that those very smallest businesses are only operating in one geographic region.

The challenge comes when we think about bigger businesses that may be operating across multiple regions, because we have to think about how we allocate that to specific areas. Quite often we use employment as a proxy for that. By and large that works well, but that might not be the case in some areas, where you have high-value activities contributing to activity being conducted by a small number of employees and maybe a larger number of administrative roles, for example, that are contributing less to the overall economy.

Q5 **Chair:** If we stick with the information that we have produced so far—regional GVA as opposed to the new stuff on GVP, as I understand it—that shows that for 2012, 2013 and 2016 the north-east fell, effectively. Can we be bold enough to assert, therefore, that there was some kind of recession going on in the north-east between 2012 and 2013?

Rob Kent-Smith: I would start by saying that recessions are hard to define. Quite commonly, people talk about a technical recession as being two negative falls in GDP quarter on quarter. We would think of that as being quite a simplistic version of a recession. Although it is quite a well-used definition, we always encourage people to look at the longer-term trends.

Since 2012, we have not had two negative quarters of GDP at a UK level, but we have had that quite commonly across a number of regions at a kind of subnational level. It is not that unusual. We expect regional data to be more volatile. A stylised example here would be if you maybe had a power-plant outage for a couple of months in a region. You might not notice that in the national economy, but you might notice that quite significantly in one specific region if it was a key part of that economy. We do expect these areas to be more volatile. For that reason, we would advise some caution around regional recessions.

In terms of the north-east more generally, in 2016 you can see two quarterly falls in GDP. That is why this quarterly data is really useful above that annual data, to give that flavour for people using that definition. I would probably advise some caution around the term "regional recession". Economists think of recessions as longer-term structural falls in the economy. Although, yes, the one-off blips we see in the regional data meet the definition of a technical recession, we would advise some caution.

Q6 **Chair:** We are using these terms "regional GDP", "national GDP" and "GVA". It might be useful particularly for our viewers, actually, to just unpack the distinction between GDP and GVA. There are some tax treatment issues around that.

Rob Kent-Smith: That is right. This does get into some of the technicality of measuring the economy, but, basically, to move from GVA—gross value added—we add the taxes on products, which are things like VAT, and we deduct the subsidies on products, which are things like agricultural and transport subsidies. We tend to find that makes very little difference in our interpretation of these numbers. It tends to be quite a small component. It does not tend to change particularly much over time. That means the difference between the two is fairly nuanced.

Both users and producers of statistics sometimes unhelpfully use these terms interchangeably. For that reason, we plan to re-label all our GVA-related statistics in the regional space to GDP in December, because we think, from a user perspective, people are interested and concerned about GDP and GVA is a very good proxy for GDP.

Q7 **Chair:** We have had two iterations of the quarterly regional GDP figures, have we not? Is the plan that we will continue to get those quarterly and on a timely basis? The very latest ones have just come out, and they suggest a six-month lag between receiving information and the period to which these relate. Is that the consistent plan going forward? Will that be roughly the timing of the release?

Rob Kent-Smith: First, yes, we plan to continue to produce them. We will be going through an exercise very shortly to assess how these data are being used and whether they are useful for people. Assuming that is the case, we will continue to produce them.

On the timeliness, there is a potential to speed these up. We have taken a bit of a cautious approach in terms of producing these at a six-month lag to make sure we are getting most of the VAT data in to help us out there. Potentially, we could produce those releases with less of the VAT data and still get an accurate estimate, so we will contemplate whether we can make those releases even more timely as we move through the next year or two and see how that goes.

Q8 **Chair:** The ONS has said that around a quarter of regional GVA data measuring annual economic growth is directly observed at a regional level; the remainder is either modelled or estimated. What proportion of the national economic data would be directly observed, by way of comparison?

Rob Kent-Smith: Most of the data would be directly observed. There are some exceptions where concepts are kind of imputed because they do not represent a real-life transfer of money. An example of that might be that, for someone who owns their own house, we assume the value of the rent they would pay on that house and model that, but everything else would be primarily directly observed.

As you rightly say, as we move through into the regional estimates, around 30% is directly observed; around 50% is based on sampling, weighting and statistical techniques that we think are robust through our survey sources; and then around 20% is based on modelled estimates.

Q9 **Chair:** Is it broadly true that as you go from the national down to the regional and down further, you are getting less and less observed data and you are more reliant on modelling and other information?

Rob Kent-Smith: Broadly, yes.

Q10 **Chair:** That is one of the reasons why it is not quite so robust in that sense as well.

Rob Kent-Smith: That is exactly right, but we would expect to see that improve over time as we make more and more use of the administrative data that can be used at that lower level.

Q11 **Chair:** I have a quick question for Mr Humpherson. You did mention national statistics. Can you just quickly unpack that for us and just explain in a bit more detail what makes something a national statistic rather than, say, an experimental statistic, which is what we are dealing with in some of this new quarterly data?

Ed Humpherson: The new quarterly data is experimental; it is still in development. The ONS has not yet settled on all of the methodological judgments it needs to make, so it signals that to its users by describing it as experimental.

Once the ONS is happy that methodology is stable and the figures are not too volatile, we will then be in a position to assess this stable statistic against the code of practice. What it means in practice is, first, that we will undoubtedly look at what they do and set some fairly tough requirements for things that they need to address and improve, either in terms of the quality of the measurement or how it is communicated.

Q12 **Chair:** Give us one quick example—on quality, for instance.

Ed Humpherson: On GVA, we recently confirmed the designation of regional GVA figures as a national statistic. One of the requirements we set there was to have much better measurement of regional rental prices, not using national inflation figures but regional inflation figures. We set the requirement that they do that. The ONS then had to go away and find a source. They did, and they have now brought that in. At that point we said, "The quality is sufficient". There are several other examples of very specific requirements that we impose on the ONS before they reach this standard.

Q13 **Chair:** You just mentioned regional prices. To what degree is this issue of regional deflator indices a major driver of problems with regional data? I mean the fact that you do not actually have an appropriate regional deflator to apply. You have to apply national figures rather than those that are more relevant to the local situation.

Ed Humpherson: The academic research that has been done in this area implies that for a lot of aspects of prices it is not a big issue. The national price levels are reflected in the regional prices. But for some issues, particularly the housing market and some producer markets, it could be significant. To some extent, the reason it is important is that the users—a lot of the people who have responded to you—are saying that they want to see these regional prices to better understand their economies. We think that the ONS should respond to that user demand and create regional price indices.

Darren Morgan: Yes, if I could come in, the availability of regional price indices would definitely be perfect in an ideal statistical world. That is why we have been working with the University of Southampton specifically to look at how we can use the data that is currently available. We have published those results.

As Mr Humpherson just said, what we have found is that price levels matter. Around your different constituencies, I am sure your constituents will tell you that price levels will be different around the UK. That is important by itself. For deflation, in the primary use that we use it for in terms of adjusting for inflation, what we have found is that the price movement is actually more important. The price movement around the different regions is not as much as you would expect. Price movements tend to be much more stable across the UK.

Nevertheless, housing is a particular area of concern, as you suggest. We have already taken action to get regional price indices for housing. Despite that, there is clearly demand and interest for regional price indices, so we are continuing to work with University of Southampton and the University of Strathclyde to see what we can do to fill this gap. There is clearly a demand, and it is on a development programme to deliver in the next couple of years.

Q14 **Chair:** That is very helpful. Thank you. Going from the University of Strathclyde to the University of Birmingham, City REDI are suggesting that our regional statistics here are less robust than is the case for other OECD countries. Is that a fair criticism? If it is or is not, why is that?

Darren Morgan: If I could, I would frame it like this: what do our users want? When we were developing our current transformation programme for regional statistics, users were really clear on what they wanted. They wanted the data more quickly, they wanted more granular data and they wanted more flexible data. By "flexible", what I mean is that, again, if you go back to your different constituencies, they wanted to draw an area on a map and the data would appear for the particular area you have drawn. They also wanted some new products to fill some gaps.

If I could address those individually, in terms of getting the data more quickly, as you suggested already, we now publish quarterly GDP. Publishing quarterly economic statistics puts us towards being the leader of the pack in the world. We publish our annual estimates a year earlier than we did previously as well. We are getting that data out more quickly. In terms of the data being more granular, we now publish economic growth and household income data down to local-authority level. That includes combined authorities, local enterprise partnerships and economic and City Deal regions as well. We are doing a lot of work on the granular side. In terms of new products, we have also published new data on public sector finances for the first time. I have already mentioned quarterly GDP. They are the new products.

We have the four big areas covered in our economics work. We have economic growth, household income, household spending now for the first time and we also have public-sector revenue and expenditure. If I were to compare us against the rest of the world—yes, we have a lot more to do; I know there are lots of submissions to this Committee that have made that point—I would say we probably hold our own, and we are leaders of the pack in certain areas. In summing up, I would disagree with that assessment.

Ed Humpherson: Maybe I could give a perspective on this as the regulator. If we had been holding this discussion four or five years ago, it would have been a very awkward conversation for the ONS. The statistics were not timely, in the way Mr Morgan has described; they were not very disaggregated; they were not particularly well explained; and the ONS was not very responsive.

As you have outlined, there have been improvements in all of those places. There is a lot more to do, and it is our job to hold the ONS to account for doing those things, but there has been a lot of progress. The way I put it to myself is that the ONS has had a kind of conversion to the vision of supporting regional as well as national perspectives on the economy.

Q15 **Chair:** I cannot speak for the whole of the Committee, but I am very encouraged to hear that. One of the feelings I have—and I suspect the Committee share it—is that it would be very useful in future *Economic and fiscal outlook* reports to have as much granularity as possible, and it sounds like we are making progress.

My final question is this. I know these new statistics are experimental—they are not yet official national statistics—but how far off are we, in your opinion, from a point at which that kind of data will start to appear in and around the Budget and in the OBR’s forecasts?

Ed Humpherson: In a sense, there is no reason why those sorts of figures looking at the regional breakdown of GDP could not appear now. One would expect the OBR and the Treasury to acknowledge their experimental status, but the figures are there. They are well explained by the ONS. They could be used now.

Q16 **Chair:** Could I just very quickly interject on that? That is a very fair point. Of course we can put out what we wish to. I suppose my question was probably ineloquently phrased. Would it be sensible, at the moment, for example, to put those kinds of statistics out there, or are they just too experimental and too young to add to the debate?

Ed Humpherson: I would say a couple of things about that. First, these regional GDP figures are not the only statistics that could be used. There are good regional GVA figures that are national statistics. They have a lag; they are slightly more aged; they are describing an older time period. They could easily be drawn on with confidence.

Q17 **Chair:** That is 12 months out, is it not?

Ed Humpherson: Yes, they are 12 months out, but it is better than not having it.

The second point is that, because these new quarterly regional GDP figures, the more timely ones, are based on VAT, they do have a greater degree of granularity to them. I would expect Treasury or OBR to be speaking to the ONS and for the ONS to advise them on how confident they could be. In principle, however, it is a doable thing. As they mature and we then confer "national statistic" status on them if they meet the standards, then of course it becomes something they can be even more confident in.

Q18 **Chair:** Thank you very much, Mr Humpherson. I will bring you in in a second, Mr Morgan. On that specific point, it would perhaps be helpful if you wrote to the Committee to set out your thoughts on the pathway towards this kind of data and what the pros and cons of including it in those kinds of reports would be. That would be very helpful. Mr Morgan, what is your view?

Darren Morgan: Whenever you put a new product into the field, you always have to have considerations before you do that. We made a finely balanced decision before we had access to administrative data. The level and quality of the 2 million records we had to support the measurement of economic growth around the country gave us that confidence to at least put it in the field.

Nevertheless, however, it is still immature. As you suggest, it is a young data set. That is why we have labelled it experimental. The true test now is its performance over time. What will its revision performance be like? What will the volatility be like? Ultimately, we will seek views from our users on what they think of the data. Are they finding it helpful? Are they finding it useful? Hopefully the answer will be yes, but, if not, why not? That will allow us to respond to that as well.

We have a view that it is good enough, but we would really appreciate the views of users over the next year or so. We will look at the performance before we make a conclusion and before we invite, perhaps, the Office for Statistics Regulation to consider whether they are appropriate for "national statistic" status.

Chair: That is very helpful.

Rob Kent-Smith: Could I just add one thing to Mr Morgan's intervention? We are having a working-level discussion with the Treasury about these figures. They have some views about some further improvements they would like to see made to them. We share those views. Those are partly improvements that we would like to make before we seek "national statistic" status from the OSR. It is very much around seeking feedback and making continual improvement to the point where we are comfortable to have them assessed for "national statistic" status.

Ed Humpherson: Of course, I should say that there is no rubber stamp here. We will set tough requirements and ask tough questions, and things do not always become national statistics when we look at them. It is by no means a foregone conclusion.

Chair: That is very good: point taken.

Alison McGovern: Thank you for coming to give evidence to us. I just wanted to start by asking about technical recessions. Mr Morgan, you said that it is all very well talking about technical recession, but we need to look a bit deeper than that, because two negative quarters of growth may or may not be important to an economy in the long run.

Do you understand the frustration that some of my constituents might express at the fact that their region might have been in recession and quite a structural downturn or a structural change in their economy for some time? We have no way as Parliament, and Government have no way as the state, to understand the impact of that on their lives.

Darren Morgan: I do sense the frustration. It is easy for us to say, "It is a technical recession; look at the longer time series to get a better picture". Our role, as the producer of those statistics, is to make sure they are understood and explained as well as they can be by users within your constituency and elsewhere. Our role is also to make sure they understand the strengths and limitations of that data so they can understand the basis of their view. Whatever view there is, it should be the most informed it can be.

Q19 **Alison McGovern:** Essentially, what you are saying there is that people might feel frustrated at that, but it not possible for them to know whether or not they live in a part of our country that has had its economy developed less strongly and less well than other areas and, as the Office for National Statistics, it is not really your fault because you can only produce the statistics that your users—i.e. the Government—want.

Darren Morgan: It is not just the Government. When I set out my introduction in terms of what we see our remit as, we are the UK's national statistical institute. We are responsible for producing those statistics and the evidence base to make decisions. The Government are a user, and an important user, but people in your constituency are another set of users, as are businesses and so on.

Q20 **Alison McGovern:** Let us look at it from the other side, then. If I were to go to the Liverpool City Region Combined Authority and say to them, "Tell me about the nature of our economy", they would only really be able to tell me what you produce. Who is responsible for this problem? Is it your customers, the users of those statistics, for not asking you to do the right things, or is it yourselves because, in producing national statistics, you are proceeding in the manner that you always broadly have?

Darren Morgan: If I can pick up on a couple of things, when I talk about the new products we are developing at the moment, over the last two or three years for the first time we are publishing quarterly GDP, we have published household spending information for the first time and we have published public sector finances for the first time.

Q21 **Alison McGovern:** I am genuinely trying to understand here. How did that change happen? Since the 1970s, the economies of the UK have been diverging, but we have not been able to produce timely, high-quality and verifiable statistics on that phenomenon. What has changed?

Darren Morgan: A couple of things have changed. One is that, as Mr Humpherson said, there has been a step change in terms of the data and the priority that has been given to regional statistics over the last three or four years. That began in 2015-16 with the latest spending review cycle, where users told us what they were interested in. As I said, they wanted more granular data more quickly.

Q22 **Alison McGovern:** Which users do you mean?

Darren Morgan: It was a range. It was local authorities, chambers of commerce, Government and lobby groups in different parts of the country. A whole wide range of users would have fed into that priority-setting in terms of what they would like. We cannot do everything: that is not possible. We had to prioritise what they were telling us, but a lot of what has come out is what users have been telling us they wanted. Data down to local authority level, for example, was a really key thing they wanted, so we have delivered that. We also did that for the new combined authorities, which was a new geographical breakdown.

Q23 **Alison McGovern:** Would you say the lack of devolution in England outside London has led to a paucity of statistics on economies in England outside London?

Darren Morgan: No, I would not. Some of our most active users are in Manchester—for example, in the Greater Manchester region.

Q24 **Alison McGovern:** Let me just stop you there. The Association of Greater Manchester Authorities has formed a combined authority over the past 25 years. That is why they are an active user of your statistics. Actually, you are proving my point that the presence of devolution has had an impact on your work.

Darren Morgan: Devolution definitely has had an impact, but I would not limit it to London. Devolution has had a massive impact. Devolution of powers out to the regions has increased demand and interest in regional statistics. There has absolutely been a step change in that level of interest.

Q25 **Alison McGovern:** There is a connection between our ability to understand the economy and the powers that are used in pursuit of policymaking for those places.

Darren Morgan: Yes, of course.

Q26 **Alison McGovern:** Trying to make economic policy for the whole of the UK, if it is done in a blanket way across the UK, might actually be an unproductive way to make economic policy for places whose economic phenomena were not accurately reflected in that national picture.

Darren Morgan: You are slowly going very close to the boundary of my expertise here.

Alison McGovern: Let us test where that boundary is.

Darren Morgan: I will see what I can do. I would sum up that you probably want both, do you not? You want devolution of powers. Some people are very big fans of that, and it has worked in some areas. I do not have a view and I am not in a position of expertise to talk about whether national or devolved policy-setting is better. I am not in that position, and it is not our role to do that.

Q27 **Alison McGovern:** Let me come back to the regional deflator indices. Mr Morgan, it might have been you who said that it did not look like there was much of a picture there apart from in relation to housing. Can I just ask you about a couple of things, the first of which is childcare?

Darren Morgan: On the top of my head, I am not sure of the price change or price levels of childcare. I am sorry. We can write to you after in terms of the detail that we have on that.

Q28 **Alison McGovern:** What about leisure?

Darren Morgan: Leisure, no, not so much. For the leisure industry, which is one I am a bit more familiar with, in terms of the price change in the cost of leisure and how that has changed over time, there are not what I would describe as significant differences across the UK.

Q29 **Alison McGovern:** Back to devolution, let us do a little bit of "compare and contrast". Scotland has a well-developed Parliament and devolved Government with extensive policy-making functions. Do they have better data because of that?

Darren Morgan: If you look at Scotland, Scotland produces a lot of the numbers themselves. The Scottish Government and the statistics system within Scotland actually produce a lot of numbers themselves, as well as having us provide the data to them. It is fair to say that they are one of the stronger areas for statistical production.

Q30 **Alison McGovern:** It is not an issue of size, is it? The Scottish population is not what determines the quality of the statistics and the knowledge there. It is the fact of having an institution, is it not?

Ed Humpherson: If I could come in there, we assess what the Scottish Government, the Welsh Government and the Northern Ireland administration produce in the same way we assess the ONS. You are right: the economic statistics produced by the Scottish Government are high-quality, comprehensive and very well done. Just to reinforce your point about size not being significant, that is also true of the Northern Ireland Administration.

In fact, Mr Kent-Smith quoted some figures earlier about the proportion of GDP statistics that are observed versus modelled or estimated. The proportion of directly observed statistics is much higher in Northern Ireland because their statistics agency, which is called NISRA, does a lot of direct surveys of businesses in Northern Ireland. This point about size not being the only factor determining the quality of statistics is absolutely borne out by that evidence.

Q31 **Alison McGovern:** Answer me this question. Given what you have just said about Northern Ireland, why are people who live in Northern Ireland entitled to understand more about the country they live in and the economy that determines their life chances than my constituents?

Ed Humpherson: The public good of statistics is that at any level people have the right to have access to the same level of information. One of the things I said at the beginning was that this would have been a bleak conversation four years ago and we are in a better position now. The thing that is not yet in place is that notion of really good publically available information that integrates at a regional level.

If you wanted to find out GVA in your region, you could. If you wanted to find out about the labour market in your region, you could. If you wanted to find out wellbeing in your region, you could. It is not packaged together in a way that gives an integrated picture of economic welfare in one place. That is where both the ONS and also the regional combined authorities need to go. They need to bring the things together. They need to bring the materials that are already there into one place.

Q32 **Alison McGovern:** With respect, what you are saying is that you are accepting my point that it is not good enough outside the areas that have devolved institutions, but in the past couple of years we have tried to make up some of the difference.

Ed Humpherson: It was in a bad way a few years ago. It is definitely improving, but I would say that it is my job to make the ONS really up its game further. There is a lot more to do; there is a lot more to do.

Q33 **Alison Thewliss:** Is it fair to say that the latest geographic imbalances in the UK are still with London and the south-east, or is that there are more economic differences within regions and between regions?

Rob Kent-Smith: People often talk about a north-south divide in the UK. A superficial look at the data at the top level would support that view. If we look at GVA per head, we see that is highest in the south-east and London. We see consistently strong and well-performing labour markets across the south-west, the south-east and London as well. Productivity is higher in London and the south-east. In trade and services exports, we see half of the UK's exports coming from London. At face value you would say that there is very clear evidence of this north-south divide.

There are some exceptions. Interestingly, Scotland was one of the ones I was going to pull upon. We do see some above-average growth in household income in Scotland; we see stronger GVA figures; we see strong growth in the Aberdeen City Region. There are some areas there. We also see pockets across the country either in specific areas or in specific parts of the economy. If we think about the north-west, we see strong manufacturing exports. There is a range of examples that you can pull on.

What I would say is that it is not a simple picture. We talk about this London and the south area being strong, but there are parts of the south that also do not perform well. There are some coastal areas in the south that do not perform well; there are some parts of London that specifically do not perform so well. We also see some richer areas in the north that perform comparatively strongly. These are places like Cheshire and North Yorkshire.

What I would say is, yes, from a superficial look you get that really clear view of different performances between the north and the south, but there are some exceptions. I would say that just as important is the inequality within specific areas as well as between big geographical blocks of the country.

Q34 **Alison Thewliss:** What would you expect when comparing the average conditions of large regions with the diversity of local authorities?

Rob Kent-Smith: Again back to the point I just made, it can be quite different. As you move across different geographical areas, you will get different levels of comparison. Taking an example we used in a blog recently, if your geographical area is a street in London that has the highest house prices, the chances are that is going to look really high. If you look at Barnet, the local authority where that street is in, it does not look so high because you have taken a wider geographic area. As you move up, you will get different measurements.

When you are looking at any regional base, it is important to think about the properties of the area you are looking at. That will help aid the interpretation. It is not a simple answer, but that is why we feel quite strongly that we have to have this multi-level breakdown of the economy to enable people to make those comparisons between and within.

Q35 **Alison Thewliss:** Looking at this inquiry from my point of view, I certainly would not treat Scotland ever as a region. It is a nation with lots of very different regions within it. Within the west of Scotland, you have a huge difference between Bridgeton and Bearsden, and things of that kind. How meaningful can the data really be with these hugely divergent differences?

Rob Kent-Smith: It can be quite meaningful. The challenge is the way you look at it and package it. If I had stopped my answer at the point about the north-south divide, it could have been quite a boring and dull conversation.

Actually, the strength in the data and this discussion is to read into that nuance and look not just at one data set. Do not just looking at GDP but look at incomes, labour markets, productivity and wellbeing, and paint that richer picture both across domains but also between different types of local areas. This can be a very rich debate when we do not focus on specific kinds of soundbites. Peeling away some of the layers of that data—it is part of job as well to tell and explain that story—is a really important part of understanding economic performance across different parts of the UK.

Q36 **Alison Thewliss:** To peel back further from the soundbites, do you feel the data you have supports the hypothesis that left-behind towns are amongst the most deprived parts of the UK?

Rob Kent-Smith: As part of telling that story, we published some analysis on different types of towns in the UK back in July, where we looked at 1,200 towns. We generally found that towns were not more deprived than cities, but we did see quite a mixed picture. Some towns were performing quite well, and that is because some of them might be economic hubs in their own right or were commuter areas into bigger cities, but some were not performing so well.

I had a quick look at some of the data around this in preparation for this Committee. In our own part of the world, in Newport, where the ONS is based, we have Newport as a city and then a small town called Caerleon, which is not far away from Newport. We see quite different performance there, where Newport perhaps fares a little less well in terms of some of that towns analysis, but Caerleon tends to be a place where people commute in and out of rather than necessarily work, and it performs comparatively well. Even in those areas, which are probably a mile or two away from each other, in terms of our part of the world in south Wales, we can see quite different stories in those towns and cities.

Q37 **Chair:** Can I quickly interject for a second? What common characteristics do the more struggling towns have, would you say?

Rob Kent-Smith: It is not straightforward. There is not an easy kind of answer. That is where we plan to do some more work. We have another article planned in six months' time around, "We have done this across the 1,200 towns to look at where the differences are; what kind of key themes can we pull out in that next layer of analysis?"

Some of the areas we might think of include the extent to which there is urbanisation versus rural, the extent to which people commute in and out of those towns versus live there and the types of industries that they are involved in. Coastal location is something that has also been important as well, with some towns on the south coast of England struggling for demographic reasons. They generally have an older population, and they might have more health concerns because of that demographic. It is very much a mixed bag and an area where we need to do more work to peel off some of the layers of that story.

Q38 **Alison Thewliss:** That is really interesting. The ONS data indicates that London, the south-east and the east of England all had net fiscal surpluses in the 2018 financial year, meaning that those regions raise more revenue that had spent per head. Does this mean that those regions effectively subsidise the rest of the UK?

Rob Kent-Smith: This is an area where we have started to produce new statistics. In May 2017, we introduced these public sector finance statistics. You are exactly right. What this means is that those regions paid more out in taxes than they received in benefits and services from Government. The implication of that is, yes, there is some redistribution across the country from that perspective.

To peel some of the layers off that, it is interesting to look at what has happened, particularly in London. When we break down the composition of what types of taxes are being paid, it looks markedly different to other areas of the UK. There are a couple of examples here. Stamp duty land tax is higher in terms of revenue than excise duties in London. That is the only region where we see that.

Another example is corporation tax. That is higher than the combination of both council tax and business rates. Yes, there are some factors going on here, but we actually see at the more detailed level some differences in the monies that are coming in. That might be more associated with the types of activities, business and households that are based in London than it might be around an active policy decision.

Q39 **Alison Thewliss:** To what extent does the scale of the net fiscal transfers from these regions to the other regions and nations have any impact on regional disparities? What are the limitations of that?

Rob Kent-Smith: It is hard to tie this data up with the extent to which that then goes on to impact the economy and individuals. I would say that is probably something we are not in a position to comment on, given the data we currently have available, in terms of that kind of causality.

There are some limitations to these data sets. They are still experimental statistics. They are based on a principle: who pays and who benefits? That is the way we try to break this data down at a regional level. That can be quite challenging to do, because we do not raise and collect taxes on a country or regional basis by and large, with some exceptions in the devolved nations and devolved Governments. It can also be quite difficult to determine who benefits. It is not unusual for people to access health services across different regions, despite being based in one region or another.

It is quite challenging for us to do that breakdown. We think we do a good job of it with the data that we have available, but it is not perfect by any means. One of the limitations of these statistics is that some of these things are quite difficult to break down to a local area.

Q40 **Alison Thewliss:** Turning that subsidy idea on its head, we have received evidence that indicates there is more of a systematic funding bias towards London in terms of Government research and development and higher education spending. Does your data support that?

Rob Kent-Smith: As the ONS, we do not produce data in this domain. We do not have the level of granularity to be able to answer that question directly. However, the Treasury publishes its country and region analysis, and it does have some figures around this, which I am happy to talk through.

We generally find that, yes, London does receive more in research and development funding, and we see that both in cash terms, in the amount that they get, but also on a per-head basis when you look at the population. Again, however, there are some specific details that are of interest here around London. In most areas, you will see education, recreational culture, religion and economic affairs as big areas where most regions receive the most research funding. The one that is a little bit different is around medical research and health research. That is where London seems to punch above its weight and get more than you might suspect from population shares alone.

We have not done this research, so this is not a matter of fact, but one hypothesis could be that there are more types of organisations in that area that specialise in that type of research, in an area where there is comparatively high funding. That could be an area for further work to try to unpick that view.

Q41 **Alison Thewliss:** That would be interesting. Is there any data on whether there is any bias in investment funding towards London, and whether that affect the availability of productivity spending opportunities in London?

Rob Kent-Smith: One of the areas that we do not collect statistics on and we do not publish statistics on, in fact, is regional investment more broadly. That is because it is very difficult. When we think about business investment and the investment that businesses might make, it is very hard to ascertain where some of that investment would sit geographically. It is an area that is on our to-do list, as Mr Humpherson talked about, in terms of some of those continues improvements where we need to do more. It is methodologically very challenging. That is one of the reasons why we do not have data in that space.

Q42 **Alison Thewliss:** That is very interesting. It is an interesting point for me to look at to see whether it is the case that more spending in London makes London more productive and all those other things that go with that. For example, the transport spend in the north of England compared to the south of England is very different as well. If you had the same level of spending, would there be less inequality? I suppose that would be what I would want to find out about.

Rob Kent-Smith: It is definitely something we are interested in as well, but it is very difficult to collect that data. If we went out and surveyed businesses—we have looked at some of this—it would be very difficult for them to disentangle where that investment is taking place. It is definitely something we are keen to look at. I have just thought of another survey where we do have some data on this, actually. I would be happy to write to the Committee about that, but it is not in our core regional statistics domain.

Q43 **Mr Baker:** I am delighted that you are working with the University of Southampton. All the best people went there. You are also positively radiating enthusiasm for your subject, for which thank you very much. Thank you for the work you do, because it is making a nice change from all the existential political angst we all have.

Can I just unpack a couple of things that you have said? You have got me saying “unpack”; you will get me talking about “layers” in a minute. You talked about revision performance and volatility with these statistics. I am just thinking about the sample sizes. Is a higher volatility not inherent in these smaller sample sizes in regions? What I am taking from the implication of what you have said is that lower volatility implies higher-quality statistics. I am wondering whether it is inherent that there will be higher volatility in smaller regions.

Darren Morgan: You are right on both counts. Volatility by itself does not necessarily mean a statistic is poorer quality. It is one thing that we look at, though, so it can imply lower quality if the volatility is high. It is not black and white.

You are absolutely right: when it becomes more granular, we can do a lot of clever estimation techniques, but it just comes down to the fact that when you have a smaller sample size for a particular area, you are more likely to have lower quality. Yes, absolutely. That is why we keep going on about administrative data being a game-changer here for regional statistics.

Q44 **Mr Baker:** How will you distinguish between volatility that arises through poor quality and volatility that is inherent in the data you are measuring?

Darren Morgan: One of the things we can do there is, once we have a longer time series, we can see the performance of the data over time. What we would expect to see is that the volatility will be relatively stable over that time. If it is, that might actually imply that the quality is actually okay. If, over a longer time series, that volatility either increases or it does not settle down, that implies that there is something more fundamental there in terms of the quality of that data.

The other thing we can do is triangulate. Something the Office for Statistics Regulation said in its submission was about getting that local intelligence. What is going on in particular areas? It might be genuinely volatile. For whatever reason in a particular area, in your constituency, there could be something going on that means the data is volatile for that particular time. We are keen to explore that recommendation and to speak to people in the regions more to understand and get that local intelligence to give us some confidence about whether the volatility is correct or not.

Q45 **Mr Baker:** Mr Humpherson wants to come in. If I can just put an extra gloss on this question, you can perhaps try to answer them both. You also mentioned an implication about revision performance, and I wondered whether in a moment—perhaps Mr Humpherson might have a go first—you could just explain where the extra refined and improved data will come from that will allow you to measure the revision performance of your statistics. Mr Humpherson, did you want to make your earlier point?

Ed Humpherson: I was just going to come back to this point about regional intelligence or intelligence about regional economies. The idea we pitched in our submission to you is that ONS has made all of these improvements that we have described, but there is more to do. One of the things to do more is not simply the better packaging of an integrated picture that I was referring to earlier; it is also having much better local intelligence. This is rather like the Bank of England has regional agents who are embedded in regions. They know the local decision-makers; they know the local businesses.

The advantage of that regional model is about the kind of intelligence that says, "We think this volatility is really hard to explain", versus, "We think that volatility is because we know there is something going on in the underlying dynamics of the economy, because that is what all of the stakeholders in the local economy tell us". That is really valuable. There is a limit to how much you can learn from torturing the data. Sometimes those networks are really crucial.

Q46 **Mr Baker:** "Torturing the data"—how marvellous! What about the revision performance? Tell us a bit more about where the new, more accurate data comes from.

Darren Morgan: We have talked about this. Today is only the second time we have published our quarterly regional GDP estimates. We have a very young series at the moment. Although the data is volatile, will it change when we add later data to it? Does it fundamentally change? We will probably not know that for at least a year. We published quarter 4 this morning. Will the number we have published today be very close to the number that we publish in a year's time?

Q47 **Mr Baker:** I perhaps did not put my question in the way I ought to have done. What I am interested in is where the new data come from between now and next year that actually allows you to revise the number? Where does the quality come from?

Darren Morgan: The addition is that we may get later VAT returns in this instance. That is why we have a reasonably high level of confidence. Because the administrative data we have is so rich when we first publish, we are not necessarily expecting significant revisions in this area from those data sources, though you can get late returns.

Q48 **Mr Baker:** That is a really key point. With all of this in mind, are the forecasts for regions viable? Is regional data not adequate to the task?

Darren Morgan: In terms of the ONS, we do not forecast ourselves. We paint a picture on what has happened. We are working with partners at Strathclyde, on this occasion, in terms of this. They do some regional forecasting on this. Rob works closely with them on some of the development activities. I will invite Rob to respond to you.

Rob Kent-Smith: With the University of Strathclyde, at our Economic Statistics Centre of Excellence, we have a project that looks at taking the regional data that we produce and forecasting it so that it is as timely as the UK estimate. We have been publishing that data for getting on for a year now. As Darren says, with new series you need to let them run for a while to see how well they perform over time. What we have seen alongside the quarterly estimates is that they are a good approximation of those quarterly estimates, although there is clearly more work to do.

What we plan to do there is to work with University of Strathclyde to incorporate the latest quarterly estimates into the model to get a predictor of those as well, which will help. That is in the realms of nowcasting rather than forecasting. As Mr Morgan says, forecasting is probably not in our remit. We would need to see the quarterly GDP mature for a while to see how volatile it is and how it works.

The other thing I would bear in mind is that we need to think about how easy it is to forecast some of those things. The UK economy might be shocked fairly infrequently in a way that would impact GDP. Regional economies might be shocked more frequently in a way that would impact GDP, and it might be very difficult to predict what those of those shocks might be at a regional level. The performance of those forecasts, I would imagine, in the same way that our data is, would probably be more volatile and potentially more prone to revision.

Q49 **Mr Baker:** You mentioned the word "nowcasting" as you answered that question. Are you saying those nowcasts will be more volatile?

Rob Kent-Smith: They will not necessarily be more volatile, but they might not accurately capture the volatility. The way you forecast this is to think about the trend and the thing that has happened and assume that that carries on. Regions might be more subject to shocks and are more subject to different types of shocks, so in a statistical way it is very hard to predict what those shocks might be and when they might occur. Those forecasts would likely be less accurate of the observed picture, just because it is very difficult to know what those shocks are going to be and when they are going to come.

At a UK level it is easier, because those shocks do not come particularly often, but at a regional level, as we said, we quite frequently get these two negative quarters compared to the UK level. That is one of the reasons why it might be more difficult.

Mr Baker: Since we are talking about the feasibility of regional forecasts, can we just take a slightly different tack on that? As I listened to Alison Thewliss asking you earlier about Scotland and London, which came up very quickly, it prompted me to look at the populations of five nations, which were not selected at random. There is a bonus mark if you can tell me the common theme. London's population is 8.9 million according to Google; Scotland's is 5.4 million; Norway's is 5.3 million; Switzerland's is 8.5 million; and plucky Iceland only has 360,000.

Alison McGovern: That is the same as the Wirral.

Q50 **Mr Baker:** There we are. That is a great point, because we are talking about regions, and it seems to me that unsaid in the conversation is a sort of implication that regions are somehow comparable. Actually, they are not comparable, are they? London has a population considerably greater than Scotland's, which must surely mean it is very difficult to compare, given very different population densities and economies and all that. It is very difficult to compare them, is it not?

Darren Morgan: It is. One of the things we do, which we publish in our annual estimates, is gross value added per head. That takes account of the difference in population that you have just set out. It normalises the sizes of the different regions. There are some limitations when we do that, but nevertheless we do produce that for the very reason you are pointing out. It is to try to take account of the fact that different regions are different sizes.

Mr Baker: You also do GVA per hour, do you not?

Darren Morgan: It is per head, sorry.

Q51 **Mr Baker:** No, you said "per head" there, but you also use GVA per hour as a productivity measure. Obviously, we are all interested in productivity and prosperity and the link between the two. It is obvious: we all want people to be better off. Could you just tell us a little bit about why you use GVA per hour and what the relationship is between that measure and the GVA per head you are talking about and how that feeds into the comparability of regions? Otherwise we could end up drawing conclusions from all this that end up being quite unjustified.

Darren Morgan: That is a good point.

Rob Kent-Smith: When we think about productivity, we are thinking about the amount of GDP that is created for the amount of labour that is used as part of that process. When we think about GVA per head, from a regional perspective the head might be very different to the amount of labour that is being used.

Again, a stylised example here would be that you have a very small population living in the City of London, but you have a huge amount of workers working a larger number of hours than the people who live there. When we think about GVA per head, it can be misleading. It can be distorted by commuting patterns and working in that area.

What we are really interested in, from a productivity perspective, is how much production, how much GDP, you get in for the amount of labour you are investing in that particular activity. That is how we think of the two areas. I am happy, if it is useful, to outline some of the trends we see in productivity on a regional basis.

Mr Baker: Yes, do.

Rob Kent-Smith: A question we quite often get asked is what the drivers of regional productivity are. We tend to find that some industries are more productive than others at a UK level. We see that things like finance and areas of production like manufacturing tend to have higher productivity; some specific areas of services, such as restaurants, accommodation and administration, tend to have lower levels of productivity.

A key question you might ask, then, is whether London and parts of the south-east are more productive because they are doing the right things and they have specialised in the right types of industries that are productive, or whether it is just because we see that those areas are just more productive more generally. It is actually the latter. If we look across a range of industries, we see that London and the south-east are more productive in a wide range of activities, not just because it specialises in the areas that are more productive.

The next question it leads you to ask when you think about productivity is, given that is the case, what it is that makes a firm productive or not productive. We tend to find that some of the most important factors are not necessarily geographically linked. Some of the key drivers of productivity at a firm level are whether the firm is trading internationally, the type of management structure and practices that it has, the way it is owned and the age and the size of the firm. Those can all be key factors.

With that said, there are some geographic and locational issues, but they are at a very small level. They are not at this kind of big regional level of London and the north-east or countries like Scotland or Wales. They are very much about the local area. What is the local labour market like? Are there what we call agglomeration benefits? That is when you have people in supply chains co-located next to each other, and that leads to productivity increases. Do you see that consumer spend is higher in that area?

At a very high regional level, it is actually not about geography. It is the fact that some business characteristics tend to be more productive within those areas. When you get down to much smaller levels of geography, yes, some of those benefits from the local area do become an important factor for productivity.

Q52 **Mr Baker:** Since we are on productivity, tell me a bit about total factor productivity and what you might do with regional measures of total factor productivity.

Rob Kent-Smith: This is an area that we are still looking at. In total factor productivity, we think about the capital area that we have here. I talked earlier about measuring investment; capital is very difficult to measure. We are not in a position to do a huge amount around some of that at the moment, basically because the data will not lend itself to measure that in an accurate way.

It is high on our development agenda to think about how we better measure investment and therefore capital services from that investment, but we are probably a little way off in terms of that total factor productivity, just because of the data availability and the difficulty for businesses in giving us that data at a very local level.

Q53 **Mr Baker:** I cannot help myself, because it is a subject I have raised many times. In terms of the the heterogeneity of capital, sometimes businesspeople tend to say "capital" when they mean money. That is fine, but when I say "capital" I mean the factors of production and how they are structured and distributed. Just for the record, you are nodding. Can you just tell me a little bit about what you mean when you say "capital" and what you are actually trying to measure when you look at capital and the factors of production? What are you really trying to get hold of that is going on with capital?

Rob Kent-Smith: It is very much the second of your definitions there. This is about the goods, assets and sometimes the intangible assets that are used as part of that production process. We are thinking about things that there might be in manufacturing around machines. In a more service-based economy you might think about things around intellectual property as being important and capital assets that are linked to productivity. Those are the things we are trying to measure.

There is a good example there around intellectual property. If you have a patent for something, it is very difficult to decide what region you score that to if you have a business that is operating right across the UK, or indeed across the globe. That is some of the challenge around why we have difficulty collecting that data and presenting those types of estimates.

Q54 **Mr Baker:** I am going to have one final question, but, to try to wrap some of this up together, we are trying to produce regional forecasts for regions with very different factors of production, very different populations, very different geographies and so forth. What ought to be our ambition for what we can obtain from regional statistics? In a few lines, what is it that we should hope to get out of your products?

Darren Morgan: The promised land for us is to make available for our regional users what is available for our national users—it is as simple as that. That is our ambition. We have made great strides over the last four or five years, but from some of the questions and challenges from the Committee, you can tell that we have a little bit more to do. We have a development programme aligned to reaching that promised land, however.

Mr Baker: The final question is that nobody got my bonus mark for how I chose those countries. It was EFTA.

Rob Kent-Smith: Yes, I was going to ask whether it was EFTA-related.

Alison Thewliss: Is that a hint?

Mr Baker: It was EFTA plus Scotland. That is a story for another day.

Ed Humpherson: Can I just add something on the question of forecasts? The question is what we should do about regional forecasts. The first job is to get the statistics as good as we can and—this has been a theme running through today—as available and accessible as we can. That then creates the basis for others who are specialist forecasters to forecast with confidence.

If you look across the UK, there are lots of people who do forecasting. There are two official statutory forecasting bodies: the OBR and the Scottish Fiscal Commission. They both do really good work. Interestingly, they are both very heavy users of the kinds of statistics we have been talking about today. In fact, the reason they exist is that they are providing forecasts to enable the respective Governments to calibrate their tax and spend decisions and to have a sense of the financial envelope in which they might be working.

As you get more devolution deals where those kinds of spending and taxing decisions become less centralised, the case for official forecasting to help guide those local decision-makers becomes stronger and stronger.

It is interesting that the OBR has just started to do forecasting for the Welsh Government, because the Welsh Government are getting more of their own taxation powers. That is really important.

Coming along the rails in this whole discussion are the nowcasts that were referred to earlier. The nowcasts are not just quicker preparations of the same data; they are a model. Like a forecast, they are a model that says, "Based on what we know of the past, we would expect the current position in these regional economies to be as follows". That is a really important development, and it is really good to see the ONS supporting it. I could see those nowcasts becoming official statistics in due course, because they are so valuable. On this journey from just having data available to making useful forecasting, they are a really important component.

Q55 **Mr Baker:** What do we actually expect to get out of these nowcasts? I am fascinated to know. Forgive me. I am a geek; I am a software engineer. I can see the fascination with producing nowcasts. From your point of view as a product, I can see why you would want to do it and get excited about it. We are politicians and policymakers. Why would we want you to do it? What are you hoping to actually get out of having nowcasts available?

Darren Morgan: It is really early days, but if those nowcasts give an early indication that aligned with or was close to when we publish our official quarterly estimates, it will give you politicians and the wider user base even earlier sight of growth in particular regions. You will get that information earlier than you otherwise would.

Mr Baker: I am just rather worried that you are going to encourage politicians to do more. It is alarming.

Darren Morgan: We can only give you the opportunity.

Mr Baker: That is brilliant. Thank you very much.

Q56 **Chair:** There is always more to do. Can we just turn to living standards for a second? The Resolution Foundation says that the best measure of living standards could be median household income after housing costs. Would you agree with that?

Darren Morgan: Yes, given the considerable differences in housing costs across the country—this is one of the areas we have talked about already, where there are differences—it is useful, we think, for disposable income to be considered net after that. It gives a better idea and a better understanding of the variations in material living standards. That is consistent with the Resolution Foundation, so we agree with that. That is particularly the case for people on lower incomes, where the level of housing costs experienced will generally be difficult to avoid. We tend to agree with that situation as well.

What I would say is that we produce our small area income estimates, which include housing costs, net of housing costs as well. There will be some users that want to see both. It is a bit of a diplomatic answer, and it probably just sums up the tensions or challenges we have with different users. We agree with the Resolution Foundation that it is useful to do that, but other users find it useful to include housing costs as well, so we do both.

Q57 **Chair:** To what extent could it therefore be argued that high household incomes in London and the south-east, for instance, do not translate into higher living standards, because there are higher housing costs in those circumstances?

Darren Morgan: It goes to the root of some of the things we have been talking about. You cannot just take the figures at face value. You could read some conclusions from this and say that high income means higher living standards, and that necessarily is not the case. That is why we triangulate different data sources to give you that information.

Even in London, you have quite a massive disparity between different parts of London that are right next to each other. By itself, you cannot reach a conclusion that higher income equals a higher standard of living. You need to use other data sources to allow you to reach that conclusion.

Rob Kent-Smith: That is right, and it is not just about income; it is also about wealth. If those higher housing costs are linked to paying a mortgage on a property, there is wealth accumulation happening there—not just the income that is taking place.

Chair: Yes, statistics always need to be interpreted very carefully.

Q58 **Alison McGovern:** Steve is going to like this bit, because it is nice and geeky. Mr Humpherson, in your written evidence to us you say that conceptually a preferable approach to the production of regional statistics would be to implement a bottom-up rather a top-down approach. This is something I have been obsessed with for a long time. Would you just, for the record, talk us through what you mean?

Ed Humpherson: Pretty much everything we have been talking about today starts with the UK-level figures, which the ONS gather to inform the UK picture, and then the ONS regionalises that. It takes that UK figure and divides it up. Sometimes it does that on the basis of what we call direct observation. Say there is a firm in this region that is doing its activity; the ONS will allocate all of that firm's activity to that region, because that is the only place it operates. However, it has to do some assumption-based regionalisation as well when it takes large operating units of big firms and says, "We will allocate their UK-level figures to different regions".

That is the top-down process. The benefit of it is that it means everything always adds up to the UK total. That is not a bad outcome to desire. What we are saying in our submission—this is a bit like how the idea of having regional networks is us nudging, pushing or encouraging the ONS to go further—is, "What if you did it differently? What if you turned it on its head? Instead of saying that it all has to add up to a national total, why do you not start with a region, collate everything you know about the economic activity in that region, perhaps informed indeed by the regional networks of observatories that we suggest? You could start from there and build up, because you might get a different picture".

Talking about Scotland, we do see some differences. That is part of the picture in Scotland. There are some Scottish national accounts where some of the figures are gathered separately from the ONS, and some of them are different. You get a richer and different picture. One would not necessarily be better than the other. What it would do is tell you where to look further for different patterns and insights into what is actually going on in different economies. That is what I mean by "top down" and "bottom up".

Q59 **Alison McGovern:** There is the academic economics question of the macro being built on the micro foundations and whether we have this wrong from a macroeconomic point of view, which is one set of questions. However, I want to push you a little bit on the political question on this; I do not mean party-political but the governance political question. Might this point you have made go some way to explaining the public frustration with their lack of understanding?

At a previous one of these sessions I raised this with the Chancellor of the Exchequer. I asked what he would say to somebody on the doorstep if, when he said that the economy has grown over the past decade and we have more people employed than ever before, they said, "Well, it is not all right around here". Is this actually not just a hard-edge political thing? Might there be more to it from an economics point of view?

Ed Humpherson: This is the space of that iconic quote, "That is your bloody GDP". Hopefully you are familiar with that story, but for the transcript this is a story about a professor from King's College London, Professor Menon, who went to the north-east. He was doing a public event and he was talking about the recovery in GDP, and a member of the public said, "That is your bloody GDP, not ours", the point being that the individual member of the public, probably speaking for her community, did not feel that she could see any recovery in GDP in her lived experience.

One of the reasons we talk about the regional observatories, one of the reasons we talk about the bottom-up measurement of GDP and one of the reasons I said to you earlier that there is a role in integrating these various measures is that national-level GDP is not a particularly great measure of individual community welfare. It is not, and that is well known.

Q60 **Alison McGovern:** To be clear, we are not talking about the need for change just for the academic dignity of knowing the truth. There is actually a point about the governance of the UK.

Ed Humpherson: It is really important that people can see themselves in the statistics. That is one of the things that we look for: that they reflect the lived experience of people.

Q61 **Chair:** If I could interject very quickly while we are on GDP, you have national GDP, and the question you are grappling with is about the relevance of that to a more local situation. It may not be that relevant. There is also the fundamental question of what the relevance of GDP is. You said that welfare or happiness might be another proxy for that.

Take a measure of GDP that measured car manufacturing. If a country produces cars that are really poor and give up the ghost after a year, and then has to produce another load of cars and another load of cars and so on, they might arguably have a higher GDP than a country that produces brilliant cars that last a lifetime, et cetera. There are all these quirks as to what GDP is really measuring.

I know it is a very difficult question for you to answer shortly, but is GDP itself, with all these statistics we are discussing, fit for purpose in that sense? Is it measuring the right things in terms of what people care about up and down the country?

Ed Humpherson: There are lots of people who have a wide range of views on this. Let me give the OSR view: GDP does a good job of measuring output in the market economy. It captures all of that. If you are interested in the value of economic output at a national UK level or, indeed, increasingly at a regional level, it is quite a useful measure. If you are interested in welfare, distribution, output that is not in the market economy, unpaid output and things like that, GDP is not a good measure at all, because that is not the job it is going. If you want to understand those things, you need to go to other measures.

Q62 **Alison McGovern:** Very briefly, we have already covered this but are there any other countries that do this better than us? You said no before. Are there any other countries that do it better? This is returning to my point about it being bottom up rather than the macro purist approach.

Ed Humpherson: There are an increasing number of countries interested in broader wellbeing approaches to national measurement. The example people always give here is New Zealand. They produce the traditional economic statistics but supplement them in the ways we have been describing.

Darren Morgan: In terms of the countries we benchmark ourselves against, as I said, we do very well and we are the leaders of the pack in some areas. If you are looking at the micro-to-macro angle, probably the strongest country is Canada. They probably set the benchmark in that field. Going back to the point you were making earlier, this is largely due to the governance and the political structure that they have in Canada.

Q63 **Alison McGovern:** Again, it is this theme that there is a connection between what we know and the governance and political structures.

Darren Morgan: There definitely is in Canada, yes.

Q64 **Alison McGovern:** I have some quick-fire questions. Mr Morgan, the OSR has recommended that you might consider having a network of agents as the Bank of England does. Instinctively, would you say yes or no?

Darren Morgan: I am not going to dodge the question. It is definitely a good idea, and we would definitely look at gathering local intelligence. It is absolutely the right thing to do. Is it the best way to put people into those regions to do that? We will look at that, but we will also look at whether another option is to build relationships up with the existing infrastructure within those regions and engage with this in that way. Yes, we need to get better local intelligence, but we need to look at how to do it.

Q65 **Alison McGovern:** You do not collect intra-regional trade data. Why?

Darren Morgan: The honest answer is that it is very difficult. It is at the bleeding edge of development on regional statistics development, but we are working, again with the University of Strathclyde, to produce an estimate. So it is our plan to do so; we will do it. The reason we have not done it so far is because it is really difficult.

Q66 **Alison McGovern:** We have a serious problem ahead. If Prime Minister Boris Johnson gets his way, we will be putting some significant trade barriers between Northern Ireland and my region, the north-west. That is a crucial question, and we will need your assistance in measuring the impact of that.

I have a final question. You are a group of three men who have come to see us today. What is the gender pay gap in your organisation?

Darren Morgan: In 2018, there was an 11.8% difference.

Q67 **Alison McGovern:** What was it last year?

Darren Morgan: It was 14% in 2017 and in 2018 it was 11.8%.

Q68 **Alison McGovern:** What do you expect it to be next year?

Darren Morgan: I do not know. That is the honest answer.

Q69 **Chair:** We are getting to the end, you may be relieved to know. Before we finish, I would like to come back to the data series and this idea about what GDP is and whether it has value in and of itself. In terms of the divides there are and the regional imbalances, what other measures would you look at along with GDP that would be valuable in that context? Life expectancy would clearly be one of them.

Darren Morgan: We have talked a lot about them already in terms of getting that bigger picture for the regions. We have talked about regional prices; we have talked about inter-regional trade. That leads us to something called regional supply use tables. That is another demand that we have from our users. What that does is look at, at a micro level, the supply and demand in a local or regional economy. Investment is another one. Those are my key ones. Those are what the users are telling us they really want at the moment to get a better understanding of regional economies. I look to my colleagues to see whether they have other things they might think of.

Rob Kent-Smith: That is right. The thing I would add in here is that we would probably also encourage people to think outside of the economics domain as well, so looking at things around wellbeing. The index of multiple deprivation is also produced across Government, though not by ONS, to look at things around consumers' economics and employment data but also health, education, environment and crime. It is about seeing the economy alongside that broader basket of indicators as well.

Ed Humpherson: It is really important. You mentioned life expectancy. There is a very significant set of regional imbalances around life expectancy. Public Health England published an excellent thing called a Segment Tool, which not only takes those high-level differences between regions but decomposes them to say what is driving them in different areas. There are really significant public health issues around life expectancy imbalances.

You could also look at skills as being an area where you would want to see what the imbalance of skill levels and skill provision is. There are quite a few things that are not in the pure economics domain, which will be really important for regional decision-makers to have access to and to be able to understand what is driving them.

Q70 **Alison McGovern:** Did you say that skills was not in the pure economics domain? This is just referring back to what Steve said earlier about capital. Human capital is a crucial form of investment in economic development.

Ed Humpherson: We were talking about GDP and GVA. One of the drivers of that performance is obviously skills, but it is not directly measured in—

Alison McGovern: Not in accounting terms, no.

Ed Humpherson: No, not in accounting terms. That is what I was referring to: the pure definition of economic statistics. I would say that skills are absolutely essential to understanding the dynamics of a regional economy, and that is indeed why I mentioned it.

Chair: Before we finally conclude, is there anything else that any of our witnesses would like to add that we have not covered that you would like to share with us at all? We have been fairly exhaustive.

Can I thank you very much indeed for taking the time to come and see us today? A lot of people think that statistics is all dry and dull, but we have proved that it is both fascinating and very important. You have done a very good job of demonstrating why the stats you produce matter, a lot of the challenges that go around doing that and something around the progress you are making, particularly on regional statistics, which we as a Committee feel are so important.

I have asked whether you would not mind writing to us in terms of the kind of value there might be in publishing some of these statistics more broadly, perhaps in the OBR’s work and around Budget documents. Could I also ask you to write to us on the changes that you think are going to be necessary to get to the kind of endpoint we explored earlier in the discussion? In other words, we need robust, timely and accurate data that is fit for purpose in terms of the end users, not least of all us as policymakers, who rely so much on the information you produce. On that basis, thank you very much indeed for coming today.