House of Commons

Treasury Committee

Oral evidence: Decarbonisation and Green Finance, HC 147

Wednesday 30 September 2020

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Watch the meeting

Members present: Mel Stride (Chair); Rushanara Ali; Mr Steve Baker; Harriett Baldwin; Anthony Browne; Ms Angela Eagle; Mike Hill; Julie Marson; Siobhain McDonagh; Alison Thewliss.

Questions 110 - 182

Witnesses

I: Sheldon Mills, Interim Executive Director of Strategy and Competition, Financial Conduct Authority; Sarah Breeden, Executive Director for UK Deposit Takers Supervision, Prudential Regulation Authority; and Anthony Raymond, General Counsel and Director of Legal Services, Policy and Advisory Directorate, The Pensions Regulator.

Written evidence from witnesses:

– [Add names of witnesses and hyperlink to submissions]

Examination of Witnesses

Witnesses: Sheldon Mills, Sarah Breeden and Anthony Raymond.

Q110 **Chair:** Welcome to the Treasury Select Committee and our evidence session on green finance and decarbonisation. We are delighted to be joined by three panellists from three of the financial services sector's most important regulators. I am going to ask them to introduce themselves in turn very briefly, please.

Sheldon Mills: I am Sheldon Mills, executive director of strategy and competition at the Financial Conduct Authority.

Sarah Breeden: I am Sarah Breeden, executive director for UK deposit takers and the executive responsible for our work on climate change at the Bank of England.

Anthony Raymond: I am Anthony Raymond, general counsel and director of legal services at the Pensions Regulator.

Q111 **Chair:** A warm welcome to all three of our panellists. Thank you very much for joining us this afternoon. We will be putting questions to you member by member in turn, on different subject areas. We will generally be indicating which member or members of the panel we would like to answer each question. In the event that you are not selected, feel free to put up your hand, if you have something you wish to contribute at that point, and I will do my best to bring you in at that stage.

My first question is to all members of the panel, but I would like to start with Sheldon. Companies and investors are clearly going to face significant physical and transitional risks going forward. What key actions has your particular organisation taken to support green finance and climate change risk management in the financial services sector?

Sheldon Mills: Sustainable finance is a key priority for the FCA. We are clear that getting to net zero and meeting other climate change and social objectives requires co-ordinated action across borders and across institutions to deliver this. Finance is a key part of that solution. It is important that we translate that into unprecedented change by industry, regulators and all actors in how we invest, measure risk and assign value to assets and investments. That is the overall backdrop to our work.

Our work is focused on supporting firms to take action here, but also from an FCA perspective on supporting consumers. Our three priorities flow from our three statutory objectives.

Q112 **Chair:** Could I press you to focus on the actions you have taken?

Sheldon Mills: Yes, absolutely. Last October, we published a feedback statement on climate change and green finance. That set out our interest and the outcomes we wish to achieve in that space. There are three of those. One is enhancing issuers' climate change disclosures, which goes to our market integrity objective. The other is improving the regulatory framework so you can enable firms to consider material climate-related risks and encourage innovation in this area, so how do we get different types of green products into the market? Then the final one is to protect consumers by combating greenwashing and improving consumer access to the right type of information, as we have seen consumer demand in that area.

As for the particular action we have coming forward at the moment, we are out for consultation on disclosures in line with TCFD in relation to premium-listed issuers. That consultation ends in October, actually tomorrow, and we hope to finalise that as a rule in our listing rules for premium-listed issuers by the end of the year. I can also announce that we will, in the first half of next year, be extending a new consultation for other types of institutions in relation to disclosures on TCFD—asset managers and other institutions. We are widening that, and that corresponds with some of the work that DWP and others will be doing in this space. That is a summary of the actions we are taking.

In the international sphere, we are working with IOSCO. One of the challenges here is to get the right types of taxonomy and sustainability disclosures, which are consistent across jurisdictions. We are working very closely with IOSCO on that, and I co-chair a working group on sustainable finance there.

Chair: Thank you for that, Sheldon. I will come back to you in a minute on some of that, but can I go to Sarah now, please?

Sarah Breeden: Thank you, Chair, and happy birthday, I think. Our aim at the Bank is to ensure that the financial system is resilient to the risks from climate change and is supportive of the transition to net zero. We do that through three things: first, through our role as microprudential supervisor of banks and insurers; secondly, through our macroprudential role, ensuring the stability of the financial system; then, thirdly and importantly, through collaboration with Government, with the private sector and internationally.

On the first, the microprudential supervision of banks and insurers, in April last year we became the first regulator in the world to set out supervisory expectations for the firms we regulate to manage the financial risk from climate change. That was about embedding risk management, governance, disclosure and scenario analysis. As part of that, we asked for a senior manager at each of the firms we regulate to be personally and individually responsible for managing these risks. In June this year, we sent a letter to the CEOs of our firms, saying that we expected these expectations to be fully embedded by the end of next year.

In thinking about risk at the level of the system as a whole, we have announced that we will undertake a stress test of the largest banks and insurers for their exposures to climate risks. That is a very ambitious exercise. We put a discussion paper out at the end of last year explaining how we were going to do that. Unfortunately, given the pressures of Covid, we have had to delay that, but it will go ahead next year. We are full steam ahead, so we will be able to stress test the system to see what the risks are, where business needs to change and to help firms start embedding this risk management in how they go about doing their business.

Thirdly, as I said, there has been a huge amount of collaboration. We have been collaborating with the other regulators in this session and with Government to ensure that the disclosure requirements capture the risks associated with climate change. Sheldon and I co-chair the Climate Financial Risk Forum, which is a partnership across the public and private sectors, banks, insurers, asset managers, designed to share best practice on how to manage this risk, given that this is, by definition, an unprecedented risk that nobody has a "how to" manual for. We are gathering the best and sharing that, and we put some publications out in June this year.

Importantly, as Sheldon said, we are collaborating internationally. The Bank of England is a founder member of the Network of Central Banks and Supervisors for Greening the Financial System. I chair one of the workstreams there, focused on scenario analysis. We take all our expertise and experience from our domestic operations into that forum, with a view to learning and sharing how to go about managing this risk.

Perhaps I might say one final thing and then I will shut up. We apply the very same standards to ourselves as we do to the firms we regulate. In June this year, we published our very own TCFD disclosure that explains publicly how we manage climate risk as a corporate, and our plan to reduce the carbon emissions that we have, but also as a financial institution with a balance sheet. We are practising what we preach and putting that out there, with a view that other people can learn and copy from us.

Q113 **Chair:** Can I quickly pick you up on one point? There is a requirement for businesses to have somebody in place with responsibility for this issue by the end of next year. How is that going? In a short answer, please, can you quantify that in any way, other than saying perhaps it is going very well or whatever?

Sarah Breeden: Everybody has a senior manager in charge now. Every financial institution, every bank and insurer, that we are responsible for regulating has an individual responsible for these risks now. What they had to do by October last year was send us their plans for how they were going to embed these expectations. It is fair to say that there was a range of experience coming back. Some had very sophisticated plans; some were barely starting. It is hard to summarise and say in one line. In the letter we sent out in June, we shared some good practice so that those who were learning, who were at the back of the queue, could get to the front of the queue.

Chair: Thank you for that. I am going to have to move on, but do you mind writing to the Committee to provide whatever measure you have of progress in that area? I would be particularly interested in that.

Sarah Breeden: Yes, of course.

Anthony Raymond: Climate change represents a systemic threat to the global economy and will impact every single pension scheme. Our concern is to ensure that trustees—and we have a particular interest in regulating trustees' governance—properly take into account the financial materiality in relation to climate change risk. Our concern is that, if they do not do that, it will be too late and savers will suffer.

We have been preparing trustees for the risks and opportunities of a low-carbon economy. To do that, we have been supporting trustees in terms of guidance and being clear about our expectations. We have been embedding climate change within our regulatory approach. We recently adopted a new operating model some two years ago and have a supervisory department, which oversees quite a sizable number of pension schemes. Our intention is that our supervisors will be engaging with the legal expectations.

Probably the most important thing to reflect for today is that the Pension Schemes Bill, which is currently before Parliament and which was amended earlier this year, puts on to a statutory footing the expectations of the Task Force on Climate-related Financial Disclosures. This moves from the principles that have been set out thus far in legislation to something more harder edged in terms of what expectations will fall on trustees in the future.

Q114 **Chair:** Anthony, thank you very much. That is very helpful. Can I quickly go back to Sheldon? In February 2018, as you may recall, the FCA gave evidence to the Environmental Audit Committee, which concluded that it was "not convinced that the regulator understands the material risks that climate change poses. The witness gave the impression that the FCA considers climate change as an ethical issue, rather than a material risk for pension schemes and businesses". Do you feel that that was unfair at that point? Do you think things have now changed substantially? What would be your comments on that, please?

Sheldon Mills: I was not the witness at the Environmental Audit Committee, so I will need to follow up to see exactly what they said. In terms of our current approach, we see climate change and material non-financial risks that can impact firms as critical. They are critical for financial services for a few reasons. One of our objectives is market integrity. We seek to ensure that markets will function well. If investors and institutions cannot properly price assets due to financial or non-financial material risks, and that continues in the short, medium or long term, that can have a significant potential impact on market integrity.

It is important that we both understand and take cognisance of climate change and other material risks that we are discussing today, and find ways that the right level of disclosures and information are in the financial reporting system so that we can manage those risks. I am very clear that the FCA sees this as a critical part of its work, and I note that our new incoming CEO, Nikhil Rathi, has also mentioned publicly that he sees sustainable finance as an important priority.

Q115 **Julie Marson:** May I start with Sheldon, since we are just following up on what the Chair said? In your introductory remarks, you mentioned that you were out to consultation, which I think you said closes tomorrow, on the TCFD disclosures. Do you think the fact you are still consulting constitutes leadership in terms of what the FCA is doing? Do you think it is ahead of the curve? Do you think it should be doing more at this stage in that respect?

Sheldon Mills: We can always do more. This is a really important area, and it would be remiss of me to respond and say that we are doing enough. We can always do more. We do need to consult. We have an obligation under the Financial Services and Markets Act to think about the cost-benefit analysis of anything we put in place. We know from our work that there is inconsistency and insufficiency in climate-related disclosures, and that is why we hope to introduce, depending on what the consultation says and our response to it, these disclosure requirements in the listing rules.

As I mentioned in my opening, I do not personally think at this stage that that is likely to go far enough. That is why, as I mentioned, in the first half of next year we intend to issue another consultation, which would expand those TCFD-related disclosures to asset managers and certain parts of the pension industry that we cover. Expanding gradually in that way is likely the right way. This is an ecosystem, though, and it is important to recognise that we can impose these disclosures, but around this there need to be sensible firms providing the right inputs, measurements, et cetera, to support industry to respond to the rules we are putting in place. We probably have the right pace at the moment, but you will see more action from the FCA in this area.

Q116 **Julie Marson:** I appreciate what you say. A few weeks ago we heard from the Investment Association. It already has firms signing up to making those disclosures. It seemed to me at the time that there was a great appetite for that. While I hear what you say, do you feel you are keeping up with that appetite? We could all go faster, and I know you have accepted it to a certain extent, but in terms of taking the lead in that, and keeping up with other regulators, do you think the FCA could do more, even now?

Sheldon Mills: We are working at pace. I do not think it is a case of keeping up or not keeping up. The Investment Association has certain parts of its membership that are very keen, where there is demand. Other parts of its membership might not be moving forward as quickly.

We have to ensure that we have the entirety of the industry ready to take on these rules and make these disclosures. We will continue to work at pace and continue to work, as we do, with the Investment Association and other industry players as we move forward.

Sarah Breeden: I want to build on Sheldon's point about this being an ecosystem. I speak with experience of having done a TCFD disclosure and having tried to get banks and insurers to do TCFD disclosures. The financial system needs to have good information from its customers in order for the financial system to be able to make good disclosures. The FCA's listing rules are a really important part of that, but there are whole swathes of the corporate sector that are not listed.

That is why, in following up on the green finance strategy recommendation to Government and regulators broadly, all of us on this panel are working with colleagues in Treasury, DWP and BEIS, to try to work out the complicated jigsaw of changes that we each need to make to get this vitally important information out there, so that the financial system can take the right decisions about where and how to allocate capital.

The thing that is going to be really important is not just disclosure, but ensuring that the disclosure is meaningful, quantitative, decision-useful and comparable. It is only when you have those comparable disclosures that the financial system will do the right thing. That is a complicated exercise, because climate change is the risk you see looking ahead, not looking backwards. It involves scenario analysis. There is a lot of work that we all need to do to make sure that those disclosures are not tick-box exercises that describe how risks are managed, but genuinely convey where risks are and enable the financial system to direct capital accordingly.

Q117 **Julie Marson:** In terms of tangible actions, then, we have heard from Andrew Bailey in the past. We know the Bank of England says the transition to net zero is a very important issue. On that basis, would it have been helpful to put some kind of climate conditionality on loans provided under the Covid corporate financing facility? Do you think that would have helped?

Sarah Breeden: It is a great question. I should say at the start that the conditionality attached to the CCFF is a decision for Treasury. The Bank of England operates as the agent for Treasury, so all decisions are for them.

On the substance of your question, the important thing with the CCFF was to get the money out to companies quickly. We needed the money to get to corporates in scale, widely and quickly. "Big, broad and fast" is the phrase I use. The corporate sector had suffered an absolutely unprecedented hit to its corporate cash flows and yet needed to pay its wages and its suppliers. In the context of wanting to get those funds out to the corporate sector as soon as practically possible, so that further disruption in the economy was stopped, attaching conditionality would have frustrated that aim.

The CCFF is a short-maturity instrument, and the transition we have ahead of us is an enormous, multiyear one. I am not sure that attaching conditionality to a financing facility of less than one year would have made sense. That implies that we do not take it seriously when it matters. I would hate the Committee to think that. What we have said we will do—and we will do—is think about how best to attach conditionality, working with Treasury, which needs to agree it, given that it decides our remit, for the corporate bonds we purchase as part of our quantitative easing approach. No to the CCFF, but working with Treasury we will consider how to take that forward in the context of our corporate bond purchases, which are longer maturity.

Q118 **Julie Marson:** Anthony, perhaps I could ask you for a flavour in the same vein. Do you feel that TPR is doing enough and quickly enough in this respect? Are there any other suggestions you might have for the Government in terms of policy or incentive that could help you, as a regulator, achieve your part in transitioning to net zero?

Anthony Raymond: We are definitely on a journey. Our focus some years ago was on ensuring that trustees were properly thinking about these issues when making the decisions about where they invest and how they invest. It was really then a case of saying, "This is not ethics; this is about financial materiality. When you make these decisions, you need to think about climate change." I am struggling to think of any pension scheme that should not be thinking about this. Then we had a phase of introducing a harder edge, from a legal perspective, to some of those legal principles. The statement of investment principles now has to include those financially material issues the trustees have considered. We started regulating against that, as it were.

The real difference will be made in the form of the Bill, with the TCFD requirements being put on a statutory footing. I have to confess that we are at the early stages of that. There are a lot of regulation-making powers in the Bill, so those regulation-making powers and the guidance that goes with them will be an area of focus for us in the coming months. That will be really important. It will deliver on the commitment in the green finance strategy that large asset owners, including large pension schemes, should be reporting these things by 2022.

In terms of more that could be done, that is our pathway on the to-do list, as it were. There is quite a bit there to work through. Some of the things Sarah and Sheldon have touched on in terms of metrics will need to be worked out. I am pleased to say that we are also part of the Climate Financial Risk Forum that was mentioned earlier. That guidance, which will need to transcend the different areas, is really important. The co-ordination of this is key. We are one part. We are an important part, in the sense that it is essentially the demand side for the asset owners that we regulate that will be important, but it is one part of that. Collaboration is really important.

Q119 **Anthony Browne:** My focus is going to be on greenwashing, which Sheldon mentioned in his introductory remarks. I am not now thinking about it as a consumer protection issue, although that is an issue, but about the implications it has for allocation of capital, which a couple of you have mentioned, in particular the need to make sure that capital goes to those businesses that are aligned with the net zero objective, rather than those that do not have a strategy for that. Indeed, if the scale of greenwashing was too big, it could make the effort to become carbon neutral by 2050 more difficult for the UK economy as a whole.

My first question is to Sheldon. You mentioned in your opening remarks that it is within your remit. How big a problem is greenwashing, and are there particular examples of types of it that concern you more than others?

Sheldon Mills: It is a good question. We do focus on greenwashing, quite a lot from the consumer perspective, in terms of what is being delivered to consumers and the types of products or funds they are investing in. There are two ways we interact with either funds or products within our system. One is through our authorisations work. If a fund is being authorised with us and it pertains to be an ESG-related fund, we will look at that to see whether that is going to be clear, fair or misleading. Is it what it says on the tin? We have seen instances where what the fund says it is investing in does not really stack up with it being ESG.

Now, your question goes beyond that: is there a particular type of ESG that we should be focusing on to get to net zero? I do not wish to disappoint you, but it is not our role, and we do not have a mandate to push forward net zero—

Q120 **Anthony Browne:** No, I get that. I was just making the point that it affects the allocation of capital within the economy.

Sheldon Mills: I agree with you. In one sense, it is absolutely apposite to say that, if ESG is so broad that funds go into things like greening fossil fuel companies a little bit, we might not necessarily meet some of the goals, if the funds are not going into new and innovative businesses that are really driving change in relation to those goals. That is not entirely our role. Our role is, in a sense, to look to make sure that the fund does what it says on the tin, and that has been our focus.

I would say that our measures should support that, because the level of transparency we hope we might be able to get to should allow one to see, objectively speaking, where the capital is being allocated. When we have this big ESG banner over things, where is it actually going and is that meeting our goals? We are a little way off achieving that level of transparency.

Q121 **Anthony Browne:** I do not necessarily expect you to comment on this, but it seems to me that the ESG banner is so wide that, although as a consumer you can be ethical, it is not really meaningful in terms of investing for the net zero objective.

I have a particular question about indices, and the FTSE All World Climate index has exposure to the oil and gas sector. The FTSE4Good index has been widely criticised for having a palm oil company in there. I am not quite sure how they are regulated by the FCA, but do you have concerns about the indices?

Sheldon Mills: We do not have significant concerns, other than that from a general viewpoint we would expect the indices to seek to ensure that they are transparent as to what is on them. I cannot speak to that specific index, but there should be a level of transparency so that people can take the right choice based on the information available to them.

Sarah Breeden: I want to build on this point, which I think is really important. There are two principles that I hold dear when thinking about climate change. First, the entire economy needs to transition; it is not just producers of energy. We are all consumers of energy; we all need a plan to get to net zero. If we are to achieve the aim of net zero, all of us, whatever shade of brown or green we are, will have to become greener.

Secondly, it is not so much current carbon emissions that are important as future carbon emissions. It could well be that some of the companies that have very high carbon emissions now are going to drive the investment that gets us to net zero. Simple labels are potentially unhelpful in terms of trying to get to your macro point: are we doing enough to get to net zero? In that context, we all just need to be cognisant that the entire economy needs to transition and we all need to have a plan to get to net zero. TCFD, the portfolio warming metric and all of those sorts of things will be helpful in giving us a sense of whether we are getting there.

Q122 **Anthony Browne:** I have a question for Anthony next—great name, Anthony. Your pension funds are interested in long-term investments. Say you have a company that is not aligned to net zero and does not have a strategy for it, making internal combustion engine cars, which are going to be phased out in the UK in 15 years' time, with absolutely no plan to make electric vehicles. It might be slightly less investable than, say, Tesla, which makes pure electric-only vehicles and its market capitalisation is now above the rest of the US car industry put together. The value of the long-term investments of your members depends on the long-term strategies of the companies in terms of decarbonisation. Are you worried about greenwashing and the misrepresentation of how aligned companies' business plans are with going carbon neutral by 2050?

Anthony Raymond: It is not an area we directly regulate, obviously, so our interest is more on the demand side, as I was saying. I have a couple of very brief contextual points. In terms of pension schemes' interests, it will depend on the scheme. As I summarised at the start, with climate change generally, there are two dimensions that are important. One is the investment side of things; the other is the covenant side of things. For defined benefit schemes, from a trustee perspective, they are interested in not only the investment decisions, but also the covenant strength of the employer that stands behind the scheme. There are two aspects of that. The sorts of considerations a scheme will have depend on the type of scheme and where it is at. A mature DB scheme is going to have a very different set of considerations in what it decides to invest in than a new master trust DC scheme, which is the emerging and dominant model and will be in the future.

As to whether we have concerns, from our perspective it is really important that trustees have the correct information. I would echo the comments by the other panellists about it being a whole-system issue. Ensuring that trustees, when they are asking those questions, have the correct information to hand is really important. They are not going to be able to make that decision unless they have that information. Equally, we recognise the importance of the fact that they are asking for it. That can have a huge impact on this issue more generally, in that the demand will be there for that information to be provided when the various bits and pieces I have talked about in terms of the Pension Schemes Bill have been worked through.

Q123 **Anthony Browne:** I have another question for Sheldon first, and the others are welcome to join in. We have talked about the TCFD becoming a compulsory part of listing, but that is just the headline. What really matters is the detail behind it, how you measure it, the data and the taxonomy. The EU has its own taxonomy regime, which we are not part of now; we may come up with our own one. How much progress do we need to make on that "devil in the detail" aspect of it, in order to give confidence to investors that they know what they are investing in and that the claims of companies are as green as they claim?

Sheldon Mills: It is a very important question. That is the significant piece of work that we need to do. It is not sufficient for us just to have a rule that says, "Disclose against these 11 principles under TCFD."

Anthony Browne: People could make it up, really.

Sheldon Mills: There is no common approach; there is no common taxonomy that underlies that and allows for comparability and so on. In terms of the EU sustainable work, even though we will not be applying that rule, because it will come into force after we have exited, we will naturally be working with Government as to how they think about the UK's approach to taxonomy and those sorts of issues. The current public commitment from Government in 2019 was to seek at least to match the ambition there, and it is a matter for Government as to how that is taken forward.

From an FCA perspective, we stand ready to work through very closely with Government what that looks like in practice. We are in discussions with Government in relation to that. I cannot say much more than that. We are actively looking at it.

There is a wider point here, though, which I did mention earlier, which is the international framing of this. Our work with IOSCO is of critical importance. Today, or earlier this month, a series of letters has gone across where the chair of the sustainable finance network at IOSCO has received a letter from a collaboration of TCFD and other disclosure agencies, such as SASB and GRI, where they are going to work towards a common standard of disclosure, so that you would have the financial materiality aspects but also the non-financial materiality aspects.

This is a really critical piece of work. It needs to link well with what the EU and other international organisations are doing. The FCA is committed to working with this and with other bodies in the UK. We need to get to that common taxonomy as quickly as we can to support these rules that we are putting in place.

Q124 **Anthony Browne:** We need to make sure that regulators around the world follow the rules as well. I have run out of time, but I want to bring in Sarah.

Sarah Breeden: Let me be brief, and if other Committee members are interested we can come back to it. I come back to the point that the risk we see is not a current risk; it is a future risk. A really important part of making TCFD useful is scenario analysis. In the NGFS, we have put out some reference scenarios that are publicly available, that investors can use, that corporates can use, and they are then standardised across different issuers. Through putting those scenarios out there, there is an attempt to stop people assuming the problem away.

Q125 **Alison Thewliss:** I would like to ask some questions about the choice and influence consumers can have on their pensions and savings products. The questions are primary for Anthony and for Sheldon. It has been reported that almost no company pension schemes in the UK allow employees to stop their money going into fossil fuel extraction. However, polling from Good Money Week shows that around 40% of people want a fossil fuel-free pension product. Why is there such a big gap between customer demand and product choice?

Anthony Raymond: To start with context, for occupational pension schemes, members will have joined those as a consequence of having opted into one when they joined their employer, or having been auto-enrolled in a scheme. The amount of choice a member has, in that sense, has to be viewed through that lens. With some pension schemes you can choose the fund you have, and some have tiltings that are more focused on what we have described. For us, the system is such that the focus is on ensuring that trustees are making those decisions, irrespective of the circumstances the member finds themselves in. From our point of view, if the trustee is thinking about those financial material risks, both from the point of view of covenant but more specifically, in so far as your question is concerned, in terms of investment, that is really important.

It is possible for schemes to take into account the views of their membership. Indeed, that has been set out in some of the regulatory changes that I outlined earlier in relation to the investment regulations. Trustees can take into account non-financially material issues where that does not significantly put at risk the investment returns. There is some provision, but really, to make the difference that is required in this space, it is about embedding the reporting I was referring to earlier and ensuring trustees are thinking at every stage, when making those investment decisions, about the climate change risks involved.

Q126 **Alison Thewliss:** About 90% of workplace pension scheme members have their savings in the default strategy. Does that not indicate that perhaps it is not really working, with that limited aspect of choice?

Anthony Raymond: If the default or the fund that is chosen is run properly, that probably is the most fundamental way of dealing with the issue. Transparency is really important. As of October last year, every single DC scheme would have had to publish its statement of investment principles. As of tomorrow, that will apply to more schemes again. That is transparency that I think will start to drive that interest. We are certainly seeing in research that younger investors have a keen interest in this, more than any of the esoteric aspects of investment, which can switch investors off.

That will become more of a feature in the future, but it is important to remember the nature of an occupational scheme and how a member will have found themselves in one. Therefore, from our perspective, to effect real change in this space, it is about ensuring that the trustee is doing the right things and considering the right issues.

Sheldon Mills: I should be careful with what I say in relation to this. As with all these things, we are seeing a massive uptick in demand for ESG-related investments. That is across pensions and regular investments, ISAs and the like. That is not just coming from the young; it is coming from across populations as people genuinely see the effects of climate on the world. Particularly in the light of the pandemic, we have seen massive inflows into ESG-related funds across Europe and, anecdotally, here in the UK as well.

What we need to think about, and what Anthony has been discussing there, is whether the right mechanisms are in place so that that demand filters through into the choice sets that people have in things like pensions, and whether the right products are available with the right long-term aspects—pensions are long-term savings products—that can go into default funds, so that either the mechanism demonstrates through transparency to pension holders that there is something there for them, or you can have greater choice at the point of entry. We need to think more closely about that with trustees.

The other important point here is not just at the trustee/consumer level; it is also at the asset manager level, with this issue around good stewardship. We have done a bit of work in this space through IGCs, so governance committees. We have asked them to ensure that they bring ESG considerations into the consideration of their investment mandates and what they are considering in terms of investment, so that there is a level of transparency and focus on ESG in funds. That should start to filter through as well.

I tend to agree with you that there must be more that we can now start to do to match this increasing demand, but also filter into the overall challenge of net zero.

Q127 **Alison Thewliss:** If I am in a company pension scheme and I am part of this 40% that wants the fossil fuel-free pension product, what can I do about that?

Sheldon Mills: It is a challenge. It depends on the pension scheme that you have, whether it provides you with a choice at the outset or to change into different types of funds, or whether the default has a proportion of the fund in the type of things that meet your demand. In one sense, there is something about education, where there is choice, so we can ensure that trustees and others in the pension schemes are providing the right level of education and choice, and are not putting barriers to people making effective choices that meet the values of what they want to invest in for the long term. There might be work to do in that space. I cannot tell you precisely, for all of that 40%. It will depend on the particulars of the scheme itself.

Q128 **Alison Thewliss:** Do you feel there is a gap between where people would like to be and where they are at the moment? Does it warrant any further investigation under your competition mandate?

Sheldon Mills: The work that we are doing, which we describe as value in pensions, is a space where we can certainly think about some of these issues. If we start to think about value in pensions and investments to include these issues around choice, so that people who have the interest or appetite to invest in either 100% ESG or part of their funds in ESG, part of achieving that value measure is having the right systems and mechanisms in place so that trustees and the whole chain are taking account of and are responsive to that demand. It has competition elements, but I see it in one sense as providing the right level of information and choice set, so that pensions or investors can take the right choices. We are doing work on value measures.

As everybody will know from their own experience of pensions and investments, they feel complicated and they sometimes feel challenging. We have been working a lot with the industry on how we can simplify that process for people. One element of that, given the demand in ESG and the move to net zero, should be how we can also demystify what is going on under the box in terms of ESG requirements, et cetera.

Q129 **Alison Thewliss:** Anthony, what more could be done to make sure that people know and can access information on how green their pensions are?

Anthony Raymond: There is more to come in terms of what trustees will need to disclose in their statement of investment principles. Some of the stewardship issues will bite tomorrow, in fact, on pension schemes. The reporting elements that will come to life when the TCFD elements of the Pension Schemes Bill come through will be really helpful in that space as well. There is definitely information that is more readily available to the fingertips of savers, but there will be more to come. That will really drive more choice, to your question at the start. This will definitely evolve and result in members having more choice in this space.

Q130 **Ms Eagle:** I want to explore some of these issues about greening pension funds, but I wanted to start by asking, particularly Anthony, how asset owners and decision makers can assist in the transition to a low-carbon economy and fulfil their fiduciary duty at the same time. Do people worry, particularly asset managers, that if they go too quickly towards greener choices they will actually be sacrificing return? Is that what is making them so risk averse?

Anthony Raymond: If they do not, they will not get the returns they are expecting. It is as simple as that. This is not set out in statute; it is the common law about what trustees should be doing anyway. Unless they are doing that, the members will suffer. These are systemic issues across the piece, in terms of both covenant and investment, as I talked about earlier. Unless that actually happens, the members will lose out. It really is as important as that.

There will be, as some of these provisions bite, a cost to schemes. That is necessarily so. In the future, we expect this will just be the norm and that people will be cognisant and thinking hard about what those risks are when they are making those decisions. That will drive and support those fiduciary duties. The Law Commission has talked about these issues in the past. We put out guidance, and then changes were made to the investment regulations that related to this point. Those have happened, so those principles are there. More detail is to come in the legislation that I talked about. If they do not do this, it will result in loss for members.

Q131 **Ms Eagle:** Perhaps the loss will be medium to long term, rather than immediate. Many of those who are in the decision-making positions now may wish to maximise shorter-term returns rather than longer-term ones, and leave somebody else to clear up the mess afterwards. I suppose that is the issue over these long-term duties, that there is a bias towards short-term results, which may miss completely the investment decisions that could have been made in the short term that would have maximised assets later on. Do you see what I am getting at? This is the whole problem with market failure and issues of green finance.

Anthony Raymond: Infusing the risk in those decisions will drive the right behaviour in that space. The other thing to emphasise is that different schemes will be in different situations in this space. A newer scheme will be looking at longer horizons, as opposed to a scheme that is on the cusp of buying out. That is a very different set of considerations.

Q132 **Ms Eagle:** I do not envy you the job you have, Anthony, of generalising about pension schemes. They are so very different. Let me go over to Sheldon. Is there something that the FCA could do to give comfort in this space to those who have fiduciary duties, more than it has done so far? Are there things that could be done to increase the visibility of the trade-offs made between shorter, medium and long-term decision making, so that a pension fund manager who took what might look like a punt on a longer-term green investment would be able to demonstrate, to both the trustees and the beneficiaries, precisely why they were doing this? At the moment, this is all as clear as mud.

Sheldon Mills: First, while this distinction between long and short term is accurate, if you look presently at what is happening in markets, we are seeing the impact of people pricing in risk of climate-related issues now. We are seeing major fossil fuel companies having to downgrade certain aspects of their stock and change the way they approach dividends. We are seeing the actual impact of climate change in markets now. If somebody is thinking about their fiduciary duty, which is currently to get the best financial outcome for their clients and beneficiaries, taking account of the present will probably make them readjust and rethink where they sit now in relation to some of those issues.

We need to look at what the markets are doing. That relates to my second point, which goes to what we have been discussing. As we get more information, as we get more transparency, as we get the scenario analysis that Sarah mentioned so we can understand these risks, you can price what looked like mid-term or long-term risk into current market prices. You can adjust and, therefore, you have the opportunity to exercise your fiduciary duty in a sense that at least has what I would call disclosable risk: risk that can tell you exactly the choice sets you have made in making those judgments.

There is a debate as to whether fiduciary duties out there should change, and whether to support certain actors here you need to have regard to ESG requirements. My personal view is that, if we can get the system right as we have been discussing, with the right products and the right disclosures, you might not need to go that far at all. It will be self-policing and it will be natural to have some of these ESG-related investments in your pension fund or in your investment service offering for people. We are already seeing the asset management industry responding in that way.

Q133 **Ms Eagle:** Sarah, do you think that the quite wide-ranging ESG concept is powerful enough to make the kind of difference and help make the strategic structural shift that is being placed on its shoulders? It seems like quite a puny thing to be charged with making the huge structural shifts that seem to be expected of it.

Sarah Breeden: It is a great point. As I said earlier, the transition that we need to have as an economy to get to net zero has to affect every company and every consumer. Every single financial decision has to take climate change into account, not just those that are in ESG funds. That is why, to build a bit on the points Anthony and Sheldon were making, we are going to stress test the financial system, to look at the entirety of the largest banks' and the largest insurers' assets, to try to understand the exposure and the risk—the physical risk and the transition risk—associated with climate change. As soon as you have spotted the risk, you know where there needs to be change. The role that Sheldon talked about, stewarding the financial system and the real economy on the path to net zero, comes into account.

I agree with you. It needs to be a financial system-wide, economy-wide transition, and the stress test we are going to do next year is designed to help facilitate that. To emphasise the points that you and others have made, the horizon of that stress test is going to be decades, not three to five years. We are trying to get an understanding of the risks as we look out to 2050, so those can be taken into account in the decisions that are taken today.

Q134 **Ms Eagle:** Anthony, research from the Sustainable Investment and Finance Association last month found large-scale non-compliance among trustees with the new requirements on ESG considerations. It is frustratingly slow when you try to adopt new structures in these very fragmented systems. What do you think, as a regulator, you should be doing to try to ensure that those you regulate sit up and take much more notice, much more quickly, of these new requirements that are being placed on them?

Anthony Raymond: Was that the UKSIF report you were referring to?

Ms Eagle: Yes.

Anthony Raymond: That is something we looked into further, and it was not quite as bad as the report painted. A lot of the schemes that the report identified are actually not schemes that the statement of investment principles bit on. Only nine of the 45 schemes were within the purview of the legislation at that point, and we have been in contact with some of those to establish what is what.

It is a combination of things, really, as more of a generic point. It is about being clear with your regulated community and engaging with them. That is what we have done in training our supervisors so that they are aware of the sorts of things they need to be looking out for when they are engaging with schemes and, where necessary, enforcement. The legislative landscape has moved from a principles-based approach to something more explicit still in the future, which will really help. It is a combination of things. We are certainly seeing very encouraging signs from the larger pension schemes. The governance of the larger schemes tends to be better, and they are better equipped to deal with and look at these issues. That is our experience of engaging with those schemes. That is very encouraging.

We have systemic issues across the pensions landscape in terms of the large numbers of small DC schemes. The number of DC schemes generally is over 30,000, with 6,000 or so DB schemes. There has been a fair amount of consolidation and we are encouraging that. Any new master trust schemes that are coming into frame are doing that. A sizable proportion of those auto-enrolled go into those types of schemes. They will be the dominant force in the future, and we have quite a different type of regulatory grip over those schemes, so we have a legislative authorisation framework over them. Already we are seeing event notifications and triggers where those schemes are amending their statements of investment principles in this space. That is encouraging, but there is definitely more to do.

Q135 **Harriett Baldwin:** Can I come to Sarah first? I note it is about six months since we had the Governor in front of our Committee saying that the market had failed to price in the risk of climate change. Six months on, has there been any improvement in the market pricing in that risk?

Sarah Breeden: For the market to price the risk correctly, it needs to have the right information, so the disclosures that we have all been talking about. We are starting to see improved disclosures, but it is clear that there is some way to go. That is why, across all the regulators, there is a real push to make TCFD a part of every corporate's disclosure and to ensure that it is done in the right way.

The other thing you need to have to be able to price risk correctly is a resolution of the uncertainty about what might happen in the period ahead, in terms of climate outcomes and climate policy. Scenario analysis is a great way of trying to understand that better. The scenarios we have put out there through the NGFS are giving market participants the tools they need to enable them to price the risk correctly. Are we there? I do not think so. Are we getting there? I hope so.

The experience of how asset prices have moved through the Covid pandemic, the very large swings we have seen in oil prices, the shock to revenues that airlines have seen, will have made financial institutions much more sensitised to the possibility of these risks and these stranded assets. While the progress we have made in getting the right data and resolution of the uncertainty is partial, not complete, the environment is much more sensitised to that than it might have been previously.

Q136 **Harriett Baldwin:** Is your sense, Sarah, that the mispricing of the market is sufficiently large that this could pose systemic risk to the UK financial system?

Sarah Breeden: It is a potentially systemic risk. That is why we are stress testing the largest banks and insurers, to try to understand the scale of that risk. As I have said on a number of occasions already, this is an economy-wide transition, where the value of every real asset and every financial asset will have to change as we get to net zero. We will try through our stress test to get visibility of how that value might change, in order to drive different decisions today, so that the transition we see is an early and orderly one, rather than a late and disorderly one. It is obvious that, the later you leave it to make a transition, the sharper the change has to be.

Q137 **Harriett Baldwin:** In terms of those stress tests, are you going to make those public?

Sarah Breeden: Yes, very much so.

Q138 **Harriett Baldwin:** When might we see them?

Sarah Breeden: The plan had been to launch the stress tests towards the end of this year. We had been hoping to do it around the time of COP 26. COP 26 and our stress tests have had to be delayed, courtesy of Covid-19. We will be announcing soon what our timeline for the stress tests is. It will be next year.

Q139 **Harriett Baldwin:** Sheldon, given that we have just heard from the Bank of England that the markets are mispriced and you are responsible at the FCA for market integrity and consumer protection, are you not slightly concerned that you are going to be failing on both of those objectives?

Sheldon Mills: I do not think we are failing on those objectives, but we are very concerned, evidently, as I have said before, about ensuring that the right information and the right disclosures are out there related to this risk so we can get the right pricing in the markets. In one sense, that is why our first round of TCFD consultation focuses on premium listed issuers. These are the companies with the most stringent corporate governance requirements being listed on the main market. They will cover 480 out of 1,140 companies admitted to trading on the main market of the London Stock Exchange. That is a market cap at more than £2.3 trillion.

You can see that, if we confirm that consultation and confirm that rule of disclosure, it will have a significant impact already in terms of getting the right level of disclosure and then starting to influence the right pricing behaviour. We have not stopped there. There is guidance in our handbook, as opposed to a rule, which relates to the rest of listed firms, saying that they also need to take account of ESG considerations. We are moving at pace in this area, and that should help with some of the issues that Sarah is outlining.

Q140 **Harriett Baldwin:** When will you feel that you can say that the markets are reflecting true integrity and consumer protection in this area?

Sheldon Mills: We will need to see the compliance with the rules we may put in place. We will be considering how we expand upon those. Alongside the Bank with its stress testing and the signals we see from markets, we will start to see a picture of how much impact we are having in relation to this issue. I want to underscore that we take this seriously. It is, as Sarah has said, a major challenge for market integrity and one that we take seriously. That is why we are consulting on some of these measures now.

Q141 **Harriett Baldwin:** So this time next year we will feel comfortable that you, at the FCA, have acted on all the measures that you might want to take that would help people accurately measure this climate risk?

Sheldon Mills: I would be very happy to come this time next year and report in person on this risk.

Q142 **Harriett Baldwin:** Anthony, obviously you are responsible for protecting everyone who is saving money into a workplace pension, but we have heard that the money people are putting into their workplace pensions now, the accumulated assets, are completely mispriced. There is a risk that there could be a carbon bubble, under the 2 degree scenario, that shows that 60% to 80% of fossil fuel firms, which make up quite a large proportion of the UK indices, could be absolutely unburnable and therefore completely mispriced. Does it not worry you that you have people going into pension schemes that you personally know are mispricing risk? You have just heard that from the Bank of England as well.

Anthony Raymond: Yes, we are concerned, putting it simply. That is why we have been doing what we have in this space. It is a whole-system issue. Trustees have a really important role to play in the demand side of this issue. Trustees making sure at every stage that they are properly thinking about these issues, relative to the particular circumstances of their scheme, is critical. We are deploying a range of approaches to do that, working and collaborating with other regulators. This is an ecosystem that we are having to support in its change.

Q143 **Harriett Baldwin:** Trustees have a fiduciary responsibility to make decisions for their beneficiaries that they think are the correct decisions at that time. You are the regulator, and you are basically saying you cannot do that at the moment because the market is completely mispricing that risk. I just wondered if there is any risk that, down the line, there could be actions for mis-selling to people who are being encouraged to put their money into pension assets at these prices.

Anthony Raymond: We have gone some way to trying to make trustees think about this issue properly. The legislation has hardened up to do that. There are interdependencies in terms of trustees getting the right information to their fingertips to make those decisions. We are definitely on a journey. I cannot put it any other way than that, but we are seeing some very encouraging signs, particularly from the larger schemes, that they are beginning to address this, as are asset managers. Anecdotally we are getting that feedback as well. That is encouraging. I cannot say there is not more to do, though; there certainly is.

Sarah Breeden: It is really important to remember that two companies with the exact same carbon footprint today could have very different strategies for the future: one on a path to net zero, and one hoping the transition is not going to arise. That is why it brings it back to disclosure as the necessary first step to ensure that pricing is correct.

Q144 **Ms Eagle:** I just want to ask, particularly Sarah, some questions about how one might green central banking. It is your area of expertise on the panel. The Committee has received evidence that it may be difficult for banks to lend to some green projects at a competitive rate given the long-term horizons associated with them, and perhaps also the fact that they are unproven because they have not been tried at scale. Do you think the existing capital regime that the Bank oversees penalises longer-term projects, and might it therefore discourage green investment, because, effectively, it is overpricing the cost?

Sarah Breeden: We have to recognise that capital has to reflect risk. If something is new and unproven, it is more risky and it would be wrong to use capital weightings as a substitute for a different kind of climate policy to support that investment. It is in none of our interests to encourage banks to put depositors' money into risky things without adequate capital to back it. I hope that is clear.

All that said, I recognise that we need to look ahead and think about what investments are going to help drive the transition to net zero, because net zero will reduce the system-wide risk that we talked about earlier. We recognise that. That is where our stress test comes in. Through the stress test, we are hoping to look at every asset on the banks' and insurers' balance sheets, see which of those have risk, which of those need to change, then have that prompt the conversations between the financial institutions and their real economy customers about how that change will take place. In that context, once we have done the stress test, it might be appropriate to look at capital weightings to see whether they are having unintended consequences. In all states of the world, we need capital to reflect the risk.

Q145 **Ms Eagle:** I understand that. That sounds a bit like a "maybe, sometime in the future" answer. Let me try another. On the other side, might it be a good idea to penalise dirty lending? This is somewhat prosaically known as the "brown penalising factor." Might we be in a situation where, instead of incentivising future investment in greener, perhaps more risky products, we ought to, because we know what is damaging, start penalising dirty ones?

Sarah Breeden: I absolutely recognise that. Again, our stress test is going to give us good visibility as to which of those dirty assets intends to stay dirty and which of those has a path to net zero. If you are a fossil fuel company that is going to be part of the carbon capture and storage and hydrogen revolution that will get us to net zero, you should be treated differently than if you are a fossil fuel company that is just going to pump carbon into the atmosphere. I realise this is in danger of sounding, again, like a "maybe tomorrow" answer, and I do not mean it to, but I think our stress test will give us really good visibility of that, subsequent to which it is right to ask exactly that question. I do want to emphasise that risk is not about current emissions; it is about future emissions. That is why we need this work.

I want to emphasise the point I made earlier. This is not just about the producers of energy; it is about the consumers of energy as well. Transportation, agriculture, industry and real estate all have exposure to these risks, and we need to take that into account as well.

Q146 **Ms Eagle:** There is a financial stability issue here for the whole system, which again is in the Bank's bailiwick: whether there will be a smooth or chaotic transition; whether it will be slow, general and entirely predictable or sudden and abrupt. I suspect it is likely to be the latter rather than the former, the way things have been going recently. To what extent can the Bank try to get on top of the financial stability issues here and get ahead of the curve?

Sarah Breeden: Our aim here is to shine a light on the risk. That is what our stress test will do. It will enable us to make risks that are currently hidden and opaque very clear to the banks and insurers that are exposed to them. That is the single best way to start managing the risk and start an early and orderly transition. Angela, to go back to the point you made before, if that does not happen, that is when we have to make the financial system resilient to that future risk and where higher capital requirements may be appropriate.

Q147 **Ms Eagle:** Right, so there is an awful lot riding on your stress tests. When are we going to have responses to them? That seems to be the key that is going to solve absolutely everything.

Sarah Breeden: That is our aim. It is an ambitious stress test. We have said publicly that we have delayed it and it will start no earlier than the middle of next year. Our intent is to put out, later this autumn, a pathway of how we get from here to there, and then the financial institutions and parliamentarians like you will be clear how we get from where we are to having the results of the stress test.

I should emphasise that we are not doing nothing in the meantime. We are talking to the banks and the insurers. We are developing the methodologies and scenarios that support that. We are making good use of the extra time.

Q148 **Ms Eagle:** You have told me when it is going to start. When will it be over? Will you confirm that you are not going to put it off again? Obviously, we may be in the middle of climate catastrophe by the time you get round to it, if you keep putting it off.

Sarah Breeden: We are full steam ahead. Our current intention is to stick to the timeline we have set out, which is not to start it before the middle of next year. We have to be alive to operational challenges, depending on how the pandemic develops, but our intent is to stick to that timeline.

Q149 **Rushanara Ali:** Good afternoon. I want to pursue some of the points that Angela has raised, in particular the role of the City of London and fossil fuel financing. The City of London was identified last year in our report on money laundering, for instance, as having £90 billion-worth of dirty money laundered through it. Some of the evidence to us has shown that around 15% of global financing of CO_2 emissions is happening through the City of London, even though within the UK it is about 1%.

There is a lot riding on what the Bank and the regulators do in the UK. Sarah, you have talked about the stress test, but I wanted to get a better sense of what you are doing to bear down on those companies, such as Barclays, which is said to have spent $85 billion investing in dirty energy, coal and other fossil fuels. HSBC has spent $57 billion. There are a number of others. This has been going in the wrong direction since the Paris agreement back in 2015.

What has been done to bear down on those numbers? Can you give us some facts on what has happened? Is it just constantly increasing, as we have seen from some of the evidence since 2015?

Sarah Breeden: We have set out expectations on all those firms that they should have climate change in their business-as-usual risk management frameworks. It should be part of governance discussed at board level, to ensure that there is a strategy for delivering that risk appetite.

Q150 **Rushanara Ali:** Can I pursue this point about the numbers? There are different numbers being floated. The Greenpeace report in 2019—a more recent one—suggested that four UK banks have collectively given the coal industry life support by pumping in almost £25 billion since the 2015 Paris agreement. Do you know if that is continuing? What is being done about reversing that trend, in actual numbers? The problem is that anyone listening and watching the responses will feel that there is not clarity on the numbers. We need to know whether any impact is taking place in reducing that level of investment in fossil fuels.

Sarah Breeden: The transition to net zero is one that we need to make over many years. Fossil fuels are going to be an important part of our energy mix for a long time. We cannot pull the plug out. We have had parts of the global economy on lockdown, subsequent to which carbon emissions are going to fall by 8%, it is estimated. The economic cost of achieving that has been horrendous, as this Committee knows well.

To be clear, we need a strategy for multiyear transition that gets us from where we are to net zero. That is what we are trying to get the firms to do. It is very hard to say, "This investment is going down." Investing in Shell or BP could be part of the solution. We have to stretch our horizons and think not just about what is happening today, but what is going to happen in the future.

Q151 **Rushanara Ali:** Sure, I just think that we need some clarity on this, because otherwise, as Angela has already mentioned, we could find that the transition is not moving as fast as we need.

Sarah Breeden: I understand.

Q152 **Rushanara Ali:** Just on this point, in January 2020, the Prime Minister announced the Government would scrap foreign aid for coal mining abroad. Should our Government now look at regulators and set similar expectations for banks when it comes to coal financing? You were suggesting we cannot do that, essentially, in your previous remark. Are you saying that we need different rules for the UK financing sector and they should carry on financing coal?

Sarah Breeden: The UK financial system needs to steward the real economy to net zero. That is what the UK financial system needs to do.

Q153 **Rushanara Ali:** The point is that we are not doing that. Since the Paris agreement, since 2015, we are going in the opposite direction. That is why it is quite unsatisfactory. I appreciate the new regimes coming in and that is helpful, but it seems like the pace is not rapid enough and there are mixed messages in what you are saying.

Sarah Breeden: This is a multiyear transition. It is going to take a long time to get the economy from a position where carbon emissions have done nothing but rise to one where they are falling and will get to net zero by 2050. The financial system has a hugely important part to play in that. Since we put expectations on them in April 2019, I have seen them take these issues seriously. They are developing the data, developing the methodologies, working out what their strategy needs to be. This is like a super tanker; you cannot shift it quickly. It is going to take a number of years to get there. Our stress test will give us the best visibility of how we are doing on that.

Q154 **Rushanara Ali:** Sheldon, what can the FCA do to speed up and get some rapid action on some of this? It may be for others as well. There were recently a couple of pieces in the *FT* and *The Guardian* about three asset management companies combined overseeing £300 billion-worth of fossil fuel investments. Some of these companies are US companies with London offices: BlackRock, Vanguard, State Street and so on. What can we do to tackle the investment that goes into the deforestation and damage to the Amazon, which provides 20% of oxygen to the world?

What can the FCA and the Bank of England do, given the leadership role the Bank of England has taken? It is really encouraging, but what can we do to influence other regulators and our partners?

Sheldon Mills: There were a number of questions there. First, our role is not to direct where capital goes. People are free to invest their money where they seek to do so. If we wish to have changes to that, that is a matter for Government. I want to be clear on that. That said, what we absolutely can ensure is this concept of stewardship, where asset managers are thinking about how they invest and how they use, as you have described there, those significant investments in fossil fuel companies. How can we get active stewardship working and remove the barriers to active stewardship, so that, if asset managers are predisposed to do this—and many of them have publicly said that they are—they can use that power through voting and other mechanisms to put pressure on those brown companies of today to be the green companies of tomorrow.

That goes back to Sarah's point about how all these bits of the jigsaw puzzle work together to drive the change in this super tanker. We are working with the FRC, TPR, DWP, et cetera, to try to unlock these barriers in relation to active stewardship, which should encourage a greater pressure, in a sense, on some of these firms to move towards this.

Q155 **Rushanara Ali:** I have one final question for all three of you. Is there a role for further legislation and regulation from Government to direct where money is invested, on the stewardship point, for those who are not voluntarily doing the right thing? What are your views on that? Where might be the scope and space, for instance, for this Committee to be making suggestions to Government about how we can improve on this? Clearly, companies like BlackRock—I know it is a US company, but there are equivalents in the UK—have not been forthcoming and have not followed the voluntary route. There is a carrot approach, but there is certainly a need for looking at the stick approach, is there not? It is a looming emergency.

Anthony Raymond: I would probably reiterate some of the points from earlier, but one other aspect, which the legislation I talked about earlier envisages, is the potential for trustees, when they are looking at their assets, to look at the assumptions in the Paris agreement and to model the value of those assets relative to those things. That will be enormously helpful from the demand side in influencing behaviour and decisions on the things we are talking about. Those are yet to happen, so from our perspective we are really keen to see those things put into place, and we are optimistic that they will represent real change in this space.

Sarah Breeden: The three things that collectively are going to drive change here are reporting, risk management and targets. If we get disclosure from the real economy about its plans, and we get the financial sector managing the risks that those plans create and then stewarding the real economy to meet its target, where its target is net zero, those are the component parts that will help the financial economy drive forward the transition that Government have legislated for.

Sheldon Mills: The focus we have currently on ensuring that stewardship forms a significant part of meeting the net zero challenge, and other challenges around climate change and associated issues, is probably the right one at this point. The questions that you raise are genuinely a matter for Government policy.

Q156 **Mike Hill:** My questions are about creating consistency in the regulatory environment towards net zero. The first question is really to Sarah. In April 2019, the PRA published its supervisory statement 3 on climate risk, followed by a "dear chief exec" letter in July 2020. What supervisory expectations has the PRA set for banks and insurers, and how do your supervisors engage with firms on this topic?

Sarah Breeden: We have supervisory expectations in four areas: risk management, governance, scenario analysis and disclosure. In risk management, we want to see that firms have the financial risks that climate change brings as part of their risk management frameworks. That means they need to be able to measure it, to put a risk appetite statement together and to mitigate it. That is what embedding risk management in business as usual means.

Governance is about ensuring that there is discussion of those risks at the very highest level in the firm. We expect board-level discussions and board-level agreement on that risk appetite statement and a strategy to be set on the back of that. It also includes having the named individual, the senior manager, responsible for climate risk.

The third aspect is scenario analysis, which is trying to stretch the horizons to look at these risks further into the future. As I have said on a number of occasions, what matters is your future risk, not your current risk. We are expecting firms to undertake long-term scenario analysis and stress testing, as well as short-term scenario analysis and stress testing. Finally, we are expecting firms to disclose to the market what risks they face, in line with TCFD, but also to have disclosure from their customers to them about what risks their customers face.

Those are our supervisory expectations. When we put that plan out, we asked all of the firms to tell us by October 2019 how they were going to meet those expectations. Our supervisors have reviewed those plans and we found, as I said to the Chair earlier, a range of experience, some very sophisticated and some less so. We have shared good practice through the "dear CEO" letter you mentioned, and we will continue to supervise, so speak to the firms, understand what they are doing and push them further where they are not going far enough, in order that all banks and all insurers are meeting our expectations by the end of next year.

Q157 **Mike Hill:** That was very comprehensive, thank you. I have a similar question for Sheldon. What supervisory expectations has the FCA set for the firms it regulates in relation to climate risk? Do you think that other sectors, such as insurance, retail investments and pensions, should also be subject to climate-related supervision?

Sheldon Mills: We take a risk-based approach to supervision. In the short term, most of our efforts are focused, currently, on the response to the pandemic. As I set out during this session, we have two or three focuses. One is on greenwashing. At the authorisations gateway that looks at funds, we will seek to ensure, where funds say they are ESG-related, that that is correct and accurate. We have seen examples where that has not been the case. You will see examples where funds say they are ESG on the tin, but actually they are invested in things that are plainly only tangentially related to ESG. We speak with those firms and try to get the right approach in relation to that evidence of greenwashing.

In relation to more supervisory activity, we are working with firms to ensure that they have the right mechanisms in place to have the right levels of disclosures and are taking those processes seriously. In the pensions space, as I have mentioned, we amended our rules last December to ensure that independent governance committees must take account of ESG-related risks. There is an important point there: we do not regulate directly those IGCs. They are part of a firm. In theory, if IGCs were not taking account of ESG risks, it is my strong belief that that would be a failure of the firm and we would hold the firm to account for that, because they need to take it seriously. There are elements of potential supervisory activity that we can take forward in this space.

Q158 **Mike Hill:** Sarah, in December 2019 the Bank of England consulted on its proposals for stress testing the financial stability implications of climate change, which will now take place in mid-2021 instead. What will this stress test cover, and which firms will be subject to it?

Sarah Breeden: Our aim is, for the first time ever, to stress test banks and insurers at the same time. Ordinarily, we stress test banks to one set of scenarios and insurers to another. We are going to do banks and insurers at the same time. We are going to do the largest banks and insurers as we do so. It is likely to be the largest seven or so banks and probably a few more insurers, aiming to get 80% coverage of the market or something like that.

It will be a significant exercise, designed to cover a large majority of the companies in the sector. It will aim to do three things. It will aim to show us where the risks are in a variety of different future states of the world. Let us assume we do not manage to meet our climate goals and the planet gets hotter; let us assume there is an early and orderly transition to net zero; and let us assume there is a late and disorderly transition to net zero, as we talked about earlier. In each of those three scenarios, our aim is to see what happens to bank and insurer balance sheets. Where do the risks arise?

That enables the banks and the insurers to think, "What am I going to do about that? What management actions do I need to take to stop those risks materialising? How do I invest in carbon capture and storage? How do I drive change in the automotive sector?", consistent with the stewardship agenda that we talked about before.

The third thing that the stress test will aim to do is make sure that everybody is doing as good a job as they can of managing these risks. Nobody has managed climate-related financial risks before. This is an unprecedented risk. We want to use the stress test, frankly, to test how good the banks and the insurers are at managing these risks. Their responses to us, the data they get from their clients and the methodologies they will have to develop will hopefully improve their management of these risks.

Q159 **Mike Hill:** Anthony, we have just heard that the Bank of England stress test only covers banks and insurers. Are the pension schemes that you regulate exposed to climate risk? If so, are they subject to any form of climate stress testing?

Anthony Raymond: They absolutely are exposed to these risks, very much so. I am trying not to repeat what I said a moment ago about the Pension Schemes Bill, but it certainly envisages that type of modelling activity. I would expect that to fold out in the future. Stress testing is a very important way of understanding those risks, and we will certainly be looking at it after those provisions come into force.

Sarah Breeden: Our aim as we do these stress tests is to be really public about them. The scenarios we use, the methodologies we expect banks and insurers to develop, we will publish in exactly the same way as we published that discussion paper you referenced. Our aim in that is to enable the pension funds and asset managers to take those scenarios and apply them to their own balance sheets. Our hope is that, although it is applied to these banks and insurers, it will be a tool and a set of scenarios that will be valuable much more broadly.

Q160 **Mike Hill:** That is a good lead into what was to be my final question, about the high expectations that the Bank has for the firms it regulates, compared to the FSA and the Pensions Regulator. What can be done to match the Bank of England's high expectations? What can be done to level up in that respect? Anthony, you mentioned earlier that you are part of the CFRF now. That was going to be my ultimate last question, but you have already answered it. What can we expect from you guys?

Chair: Can we have brief answers to this one?

Sheldon Mills: My brief answer is that we have very high expectations of the firms we regulate in this space. That is shown by the work we are doing on TCFD disclosures. It is shown by our involvement in the CFRF, co-chairing with Sarah, and through multiple other activities, which I would be happy to share with you, that we have in this space. Firms that we regulate, particularly larger firms, will need to take account materially of ESG risks. That is important for market integrity and, as we have discussed, for consumer protection.

Anthony Raymond: What will bring this together beautifully will be when the legislation comes into force. Those TCFD requirements and the expectations in the green finance strategy will come to life with that legislation. Just to reiterate the importance of the co-ordination and the different forums, the close working relationship between us is really important, and having guidance that is for the finance sector generally in this space will be really important.

Q161 **Anthony Browne:** I want to throw things forward a bit. We have been talking about what the situation is at the moment and the stuff that is coming in imminently, but what else could be done from the Government’s point of view, both in the UK and internationally, to make sure that green finance plays an even fuller role in the transition to a low-carbon economy than it is already expected to do? We have COP 26 coming up, you mentioned the work that IOSCO is doing and we are a member of the FSB.

I have a couple of targeted questions, picking up on things that people have said. I mean it in a general sense, going above and beyond where we are now. I will not hold you to it publicly, saying, “The Bank of England calls for this”, or whatever, but I am just interested in what other things we should be focusing on as a Committee.

Sheldon, you mentioned, for example, that you are talking to the FRC and others about removing barriers to active stewardship. What barriers do you need to remove, and what things do you think Government should do to help remove those barriers? On IOSCO as well, what would you like to see IOSCO do that it is not doing at the moment?

Sheldon Mills: We need stewardship, but there are wider issues in relation to how stewardship works. We want stewards to take more active ownership of the way they fulfil their objectives. How can they engage in voting? What are the voting practices they have? How do they set their ambitions in terms of their investments, and how does that relate to ESG risks in particular?

In terms of Government involvement in that, Government, or at least Ministers within the Treasury, are fully active and supporting change in that area. The Economic Secretary has a good personal involvement in relation to some of that.

With IOSCO, as I mentioned, it is all about getting international common standards on both financial materiality and non-financial materiality. In that space, we have a real opportunity in the UK for leadership. We are moving towards COP 26. We at the FCA are closely involved in relation to preparations for COP 26 and with the private finance unit. There is great ambition to get towards some sort of international framework, which would allow for some sort of common taxonomy across these disclosures.

That could really unlock real change. I cannot promise that. That is about how we work together collaboratively across nations. There are challenges in relation to that, but I am committed to participating in that through my IOSCO work.

You did not ask me this, but I am going to give you one more, which is products. We have not discussed products. To excite consumers you need exciting products. If you want to excite the youth, you need apps that tell you how your investments might relate to ESG, et cetera. We, in 2019, had our green fintech challenge. We selected nine products. Some of them have even gone to market, which is fantastic. We are encouraging innovation to come in through the door, and working through how we can remove regulatory barriers, so we can have ESG-related financial services products growing up.

That is a part of, I suppose, this question about how we build this economy in a way that is greener, in response to what we are going to go through now, which is effectively a recession. We are in it. Sarah will know more about that than I do; she will be looking at those papers. There is something about how we invest in fintech and drive this green economy to develop here in the UK.

Q162 **Anthony Browne:** Can I follow up on the point you made about agreeing common standards on disclosure, taxonomy and presumably getting that enforced across countries? From your point of view, is that the main focus of the COP 26 work in terms of green finance, or are there other things?

Sheldon Mills: No, I imagine that would be part of the focus of COP 26, but the focus is really on the Paris commitments.

Q163 **Anthony Browne:** That is outside the scope of your remit, though.

Sheldon Mills: I am not responsible for those. That is beyond my pay grade and my power, but one would hope to see that COP 26 forms a great participation in moving forward from Paris to the next phasing for the global economy in terms of climate.

Q164 **Anthony Browne:** I meant in terms of the work the FCA is doing. Sarah, you have talked a lot about what you are doing at the moment. If you had a wish list of other things to do, to make sure that green finance plays a full role in transitioning to a low-carbon or zero-carbon economy, what else could be done, both in the UK and at an international level? I think the Bank of England is involved with the FSB. Indeed, your former Governor used to be chair of it.

Sarah Breeden: I would like every country in every jurisdiction in the world to be doing the sorts of exercises we are doing. This is a global problem that requires global solutions. That international aspect of us, at COP 26, showing how the finance sector can be used to support the transition to net zero is absolutely key. That would be No. 1 on my wish list, that everybody does the sorts of things we are doing and we collaborate and all get better at it. None of us knows how to do it. We are all learning by doing. The sooner we get there and the more of us who do it, the better.

The second thing, which is slightly outwith the Bank of England's direct responsibility, would be to use the opportunity of Covid to build back better, to make sure that the financial institutions and the public sector take the opportunity to re-energise the economy and build it back better in a way that is consistent with our move to net zero.

Q165 **Anthony Browne:** I think everyone agrees with build back better. The devil is in the detail. From the FSB point of view, clearly it created the Task Force on Climate-related Financial Disclosures. Are there any other things you think should be done at FSB level?

Sarah Breeden: The Basel Committee on Banking Supervision is very important, as is the IAIS, to getting the individual supervisors of banks and insurers to be doing the same kinds of things that we are doing, starting at the level of the individual institution and building it up to the system that way. That has been our way into this, and I expect that would work internationally, too.

Q166 **Anthony Browne:** Anthony, coming to the Pensions Regulator, we have talked about some of the things that are imminent, but are there other things that the Government could do to help make sure the pension industry plays an even fuller role in transitioning to net zero, as well as at an international level? I think there is not much co-ordination on pensions regulation internationally, but I might be wrong.

Anthony Raymond: We have quite a full list, as I alluded to earlier. Those things will be really important, and working through that detail will be really important. I would also reiterate the points that Sheldon and Sarah have made. International parity, the taxonomy and that level playing field will be really important in the future. We are talking about a system that is not just within the UK, but is an international thing. If I could wave a magic wand, it would be for that parity across the globe on these issues, knowing that we are saying one thing here and meaning it the same everywhere in terms of measurements and metrics. That is what will really breathe life into all of this.

Q167 **Anthony Browne:** You have talked quite a lot about ESG, but there is also the more hard-headed investment reflecting future risk and so on. You may not have information on this, but how big a role is voluntary ESG investing playing in green finance and transitioning to a green economy, versus the more hard-headed people in the City who just want the best returns on their assets?

Sarah Breeden: It is a change we have seen even over the last 12 months or the last couple of years. Increasingly, the largest financial firms have recognised that they are a mirror of the real economy. They cannot divest their way out of the risks associated with climate change. They have to drive the real economy to make the change and, if they do not drive the real economy to make the change, they are wearing the risk anyway. That has been a bit of a sea change in people's attitude. The dichotomy you have placed between those focused on returns and those focused on ESG is less sharp a distinction these days than it might have been. That is a personal reflection.

Q168 **Anthony Browne:** Sheldon, finally, do you have any views on the scale of ESG versus the returns?

Sheldon Mills: Sadly, we do not have good statistics. It is probably something we should think about researching. ESG fund flows represented almost a third of all European fund sales in Q2 2020, and sustainable equity funds gathered 63% more new money than traditional equity funds over the same period. You are definitely seeing a greater level of demand, but I do not have statistics in relation to the hard-headed venture capitalists, who probably need to invest in certain types of activity for us to see net zero. Perhaps it is something we need to look at more closely.

Anthony Browne: That is great. Thank you all for your time.

Q169 **Harriett Baldwin:** I am afraid you are not getting a break, Sheldon. I have more questions in a similar area. It sounds to me as though the UK is quite advanced in terms of the amount of money going into these environmental, social and governance funds. You do not have the data on it, but would you say there is any other financial centre out there that is further ahead than the UK?

Sheldon Mills: I asked that question in preparing for this, because it was a question that came to me, funnily enough. I was told that London is a leading centre in innovation in green finance products, flows in terms of ESG-related products, et cetera. There probably is a basis in that. We see from a listings perspective that the London Stock Exchange has undertaken quite significant activity in relation to this area. We see all the major banks with quite significant policies on ESG and units to support the development of ESG products. On the consumer side, green bonds have come through. You are even seeing green mortgages come through if you have the right level of warmth and it does not all exit. I am in a flat with lots of windows, so I do not have that; I would not get a green mortgage.

We see significant activity in London. I cannot say absolutely hand on heart whether we are the leader. Sarah may know that.

Q170 **Harriett Baldwin:** On the Committee, we all feel it would be a good aspiration to have, for the UK to really stake out the claim to be the leading financial centre in this area. Is there anything else you three, as regulators, could do to facilitate us being the global centre of expertise in managing these kinds of funds?

Sheldon Mills: Yes. It is one of the points I made earlier about the work we have done on innovation and our green fintech challenge. We can continue to encourage innovation in relation to the products and services that reach consumers and entry into that. If we work proactively with the asset managers in this country and we demonstrate and signal our interest in this space, we will see a return on our own investment as regulators.

What has been interesting for me, working with Sarah on the Climate Financial Risk Forum, is that the demand to join those working groups outstrips the number of spaces we have on them. It is not just from large asset owners or institutions. We have small and medium-sized enterprises also saying to us, "Please can we join? Can we get involved?" There is definitely appetite out there to keep the UK at the forefront.

Q171 **Harriett Baldwin:** Can I make a suggestion? With us hosting COP 26 next year, you three regulators might think about whether there is anything more you could do to galvanise the asset managers and to help the UK consolidate what it sounds like we may have and would certainly want to have, which is this leadership globally in managing these kinds of assets.

I need to ask you, Sheldon, about this red lines issue. We had a letter to the Committee in March from the FCA about the failure of the fund management industry to allow pension scheme trustees to operate a stewardship policy. Can you give us an update since March on the FCA's progress on this issue?

Sheldon Mills: Thank you for raising that and bringing it to our attention. We have written back. Again, this is a challenging and complex issue, in the sense that trustees, particularly where there are multiple trustees, may not have the power to direct the votes of asset managers. The way we currently think this should be solved is for a greater level of interaction between asset owners, asset managers and trustees, which is part of the stewardship work we are working towards, with more transparency and information on the reasoning behind the voting intentions that come there.

Often, people will move to the simplest logical solution, which might not be the best one, that trustees should just be able to direct asset managers to vote in the way that they see. We know that, in a sense, asset managers need to think about how their overall voting power is used in that space. If you are an asset manager who ends up splitting your vote across different views of different trustees, it may be potentially counter to our aims here, because that split vote may not give the right message to the firms involved.

It is a complex area. We recognise that these are real concerns and are working to bring together the actors here to ensure that there is a solution.

Q172 **Harriett Baldwin:** When?

Sheldon Mills: I do not have timing on that, but I know we have written back. We are keen to make sure we get the right conversations going in relation to that.

Q173 **Harriett Baldwin:** Is ShareAction right when it tells us that voting disclosures are often opaque and inaccessible to the actual owner of the shares?

Sheldon Mills: I cannot comment on that. We do need to work towards getting the right level of transparency so that voting disclosures are meaningful for people to put the right level of pressure in the right place. As we have said before, when all the actors are working appropriately and the right levels of transparency are there, we hope the system will work well and get the right sorts of mechanisms in so that we can meet this net-zero ambition.

Harriett Baldwin: Anthony, from your point of view as the Pensions Regulator, do you want to add anything to that?

Anthony Raymond: The demand side is really important, so trustees asking that question. By happy coincidence, some of the legal provisions start to bite tomorrow on DB schemes in terms of how they incentivise their asset managers to align their investment strategy with what the trustees are doing. That will help, but the demand side is important and I echo what Sheldon was saying.

Q174 **Harriett Baldwin:** Do you feel you need to take any action as the regulator?

Anthony Raymond: We have been encouraging trustees to engage with asset managers as with any third party in the chain. As more of the detail comes through with the legislation I was talking about earlier, that will give us a hook to have more detailed discussions with trustees on this topic. It is important; it is a whole system. It is key that the wishes of trustees and their voting wishes are reflected by the asset managers. Hopefully the hardening of the legal provisions I have talked about over the course of this evidence will help that in the future.

Q175 **Harriett Baldwin:** Sheldon, in terms of our inquiry into infrastructure investment, there is this mismatch between the kinds of vehicles that can invest in long-term infrastructure and some of these defined contribution and retail investment funds. Could you update us on what the FCA is doing to help industry facilitate these longer-term vehicles for investing in long-term infrastructure?

Sheldon Mills: We are working closely with the Investment Association in relation to long-term asset funds and trying to ensure that we have the right balance of enabling that innovation in the market, getting coalition from asset managers and others around this new type of vehicle and having the right level of consumer protection and risk in relation to that, so that we have the right badges on it and, when those funds are potentially distributed, the right types of investors can come into them. I am not saying that they are made to be risky, but they are a different type of investment than retail investors might be used to. We are working very closely with the Investment Association, and we hope to finalise that as quickly as we can.

Q176 **Harriett Baldwin:** Is that next year? I keep trying to pin you down to a time horizon.

Sheldon Mills: You do. Actually, we are in intensive discussions now, so I would hope we can resolve something within this quarter and then something should be up and running early next year, so not as far as this time next year.

Harriett Baldwin: That is great.

Q177 **Chair:** I am going to pick up with a very final question, to which I would like an extremely short answer from each panellist, please, following Harriett's crusade to pin the panel down to dates and when things might happen. When do you think this Committee will sit, in what year, and say to itself that it is satisfied that the risks associated with climate change are priced in, effectively, to markets?

Sheldon Mills: Our strategy is a three-year strategy. It works from effectively this year through to 2023. There are steps along that, in terms of the milestones we have. The final year of that, I believe, is called "embed" and that means that it is embedded, it is working and it is effective. That does not mean that things will not happen sooner. They will but, as we have discussed today, there is a huge amount of collaboration and co-working that we need to do internationally.

Q178 **Chair:** That is the FCA's bit but, overall, when do you think the market will be functioning in the way we all want it to, as a best guess?

Sheldon Mills: If we have things embedded by 2023, I would say there is a journey of transition for that over a couple of years. I am not going to put a date on it.

Q179 **Chair:** Is it 2025-ish?

Sheldon Mills: That would be ambitious, but we can go with that if you would like.

Q180 **Chair:** Anthony, give me a date, please.

Anthony Raymond: I would just put a couple of times that relate to when the TCFD provisions bite. Schemes that have assets over £5 billion have to report by 2022, and schemes with assets over £1 billion by 2023. By that stage you will be covering around 81% of scheme membership. What I am talking about is all those reporting things that we have been discussing. That will supercharge the process of ensuring that the demand side is working properly. It is really from that point that we will start to see real change.

Q181 **Chair:** From 2023 onwards?

Anthony Raymond: Yes.

Q182 **Chair:** Sarah, be as precise and short as you can, please, because we are tight on time.

Sarah Breeden: We will have embedded supervisory expectations in banks and insurers in 2021. We will have got the results of the stress test from that year early in the year after. I hope that we would be well on the way to getting there by the end of 2022. We need all the other bits of the ecosystem working as well. This is a system-wide change that needs to happen.

Chair: Thank you very much. That sounds like somewhere around 2025, in four or five years, but it is an inexact science and I appreciate you being as precise as you can be. It is a difficult question to answer.

Could I thank all three of our panellists so much for having joined us today? We have learned a great deal from the evidence you have provided. The role of financial services in meeting our climate change targets is going to be critical. As you have pointed out, and you are right, you are not the only chip in the game. We have to have a holistic approach to it, with the whole nation rowing, to ensure that we get there, but your role within that is critical.

Of course, it comes at the time of terrible crisis we are facing with the coronavirus. It is recognised, although perhaps it was not stressed in the session, that your organisations are under a lot of stress and strain as a result of that. The Government's focus and that of the public is in that direction, but it is this Committee's mission to make sure that climate change is still at the top of the agenda.

It seems to me, listening to the debate today, that you are all fairly clear on the principles and the important issues you have to iron out, in terms of pricing in risk, systemic risks and so on. You have a fairly clear view as to how you are going to approach those various elements and come up with solutions. Yet there is a huge amount of challenge involved in that endeavour and, as Harriett's and my questions at the end perhaps suggest, quite a lot of uncertainty on not just how but when we are going to arrive at the point we badly need to if the financial markets are going to play their part in meeting our 2050 net-zero commitment.

Our message as a Committee is to keep pressing on, please, and keep us updated. Let us know how you are doing on the various things that we have discussed. Once again, thank you very much indeed for your input this afternoon, which has been hugely appreciated. That concludes this session.