

Treasury Committee

Oral evidence: Work of the Payment Systems Regulator, HC 944

Wednesday 18 January 2017

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Watch the meeting

Members present: Mr Andrew Tyrie, Kit Malthouse, Mr Steve Baker, Rachel Reeves, George Kerevan and Chris Philp

Questions 1 - 77

Witnesses

I. Hannah Nixon, Managing Director, Payment Systems Regulator, and John Griffith-Jones, Chairman, Financial Conduct Authority and Payment Systems Regulator

Written evidence from witnesses:

– [Add names of witnesses and hyperlink to submissions]

Examination of Witnesses

Hannah Nixon and John Griffith-Jones.

Q1 Chair: Thank you very much for coming in to see us this afternoon. This is the first meeting with you in your new role, and with this new responsibility. You will know the history of this, of course, that the Payments Council came forward with a proposal to abolish cheques, which shocked this Committee, Parliament and the public. We took a look at it and recommended that instead of abolishing cheques we should abolish the Payments Council.

That has now happened, and that leads me to my first question. It does look as if the membership and the remit both look remarkably similar for the Payments Council and the Payments Strategy Forum. Perhaps you could, Hannah Nixon, take us through the similarities and the differences. Even if you take a moment or two to do it, I think it is well worth it.

Hannah Nixon: Sure. I would be happy to do that. Good afternoon. We have been in existence now for nearly two years, and we were set up on the back of long-standing concerns, which went back to the 2000 Cruickshank review about the payments industry being very slow to innovate where you need collaboration, and also concerns that it is the big banks that own and control payment systems. In the time we have been in existence we have actively reached out to all people involved in payments, from the end consumer through FinTech through to the big banks, to really understand what the issues are.

We have focused on three big themes over the first two years, and we have made good progress in terms of achieving our objectives of improving competition and innovation in payments in the interests of consumers. The three big themes we focused on are opening up access to payment systems, which is really about improving retail banking competition, and competition more widely. It is really answering once and for all the question about whether it matters that the big banks own and control payment systems. The third is around speeding up the pace of innovation where you need collaboration. It is that third role, which is where the Payments Strategy Forum comes in. Today we are in a completely different space than we were a few years ago. We have an industry now that is very much focused on the needs and expectations of its users.

Q2 Chair: Perhaps you could take us through the remit.

Hannah Nixon: Of the Payments Strategy Forum?

Chair: Compared to the Payments Council.

Hannah Nixon: Yes.



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Chair: Just set those out for me so we can see the similarities and the differences.

Hannah Nixon: The Payments Strategy Forum is only charged with looking at one part of our remit. That is about where you need to speed up innovation where collaboration is needed. It is an important part but it is just one part of what the payments regulator is doing. The whole purpose of that Payments Strategy Forum, which we created, is to harness the expertise and resource of industry in a wider sense, so from the end consumer right through to the big banks, to drive innovation where you need that collaboration. There are around 20 members of the Payments Strategy Forum. The differences with the Payments Council are twofold. First, there is much greater and widespread representation on the Payments Strategy Forum than the Council.

Q3 **Chair:** Perhaps you could illustrate that with who is actually on each. I want to get to the hard facts, both of the remit and of the personnel.

Hannah Nixon: The Payments Council was an industry body, so by definition it was the big banks. The Payments Strategy Forum is chaired by somebody who has very strong consumer credentials, and we recruited that person. The membership is made up of people from end consumer representatives, so, for example, we have people like Toynbee Hall represented. It includes users of payments systems, so small users of payments systems, the Federation of Small Businesses, for example, and large users of payments systems.¹ The Government themselves are the biggest user of payment systems, so there is Government representation on there as a user.

We have FinTech representation and we have bank representation too, so there is a full range of representation around that. We have also set the Payments Strategy Forum up to be completely open and transparent so everything it does is transparent and published, and we want to make sure that information can flow not just out but also in. We have established what we call the payments community, which is now about 500 people who are actively involved in informing and shaping the work of the strategy forum through events, through working groups and through consultations.

The first key difference is representation. The second key difference is—

Q4 **Chair:** I am sorry to interrupt but before we come off representation, consumers are still in a minority, are they not?

Hannah Nixon: It is roughly 50/50 how we set it up, in terms of users versus—

Q5 **Chair:** What was it with the Payments Council?

¹ The Payment Systems Regulator submitted a correction after the meeting to record that the Federation of Small Businesses is not a member of the Payments Strategy Forum, and that the reference should have been to the British Retail Consortium.



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Hannah Nixon: It was 100% banks.

Chair: I think the consumers had a voice on the Payments Council.

Hannah Nixon: My recollection is they were consulted, but I would need to check that.

Q6 **Chair:** It would be helpful if you could set up in some detail to us in writing the differences in the membership. It would also be helpful, in writing as well, if we could have an analysis of the similarities and differences on the remit. I was going to move on to the working methods that you have now started to discuss, which is a separate and also interesting issue, where there is no doubt you are more transparent. I interrupted you and you were telling us about that transparency.

Hannah Nixon: So the second difference I was going to highlight is the powers issue. We set up the Payments Strategy Forum, so it is a creature of the PSR. The whole philosophy behind this is we want the industry to harness its resource and expertise to move this forward. We stand firmly behind it and we have very strong powers. Our role is essentially to make sure that the forum is going in the right direction and that it is going at the right speed, meaning fast. If it does not do that then we can step in and make things happen faster or differently, and we will do that.

Those are the two key differences I would highlight. One is the membership; the second is the powers. In terms of the scope of its remit, as I say, the strategy forum is only looking at one part, albeit an important part, of what the PSR is doing.

Q7 **Chair:** We may come on to other areas. If we get near the end of this hearing and you still feel you have not had a fair hearing on it, you had better start waving your hand or nodding your head or something at me to encourage me to allow you to get in with it. One of the problems with these bodies is that they tend to create a culture that is collaborative to the exclusion of those who they initially were supposed to be looking after, if we are not careful. Indeed, there is a good list of regulatory bodies that have ended up like that.

The best spur to innovation is generally competition. Would you agree with that, and what assurance can you give us that the collaboration that you are engaging in is promoting competition rather than colluding against it?

Hannah Nixon: I would agree with that, and promoting competition is obviously one of our three core objectives.

Chair: That was a recommendation of this Committee, so we are very pleased to see it.

Hannah Nixon: Our overall approach has been to think about how we can get as much competition into this sector as possible. That is why I



say the strategy forum's work is just one part. That is about where you cannot get competition effectively into the system because you do need collaboration, because banks and payment systems need to be able to talk to each other. That is where the strategy forum is focused. Our other work is very much about promoting competition. For example, we have done a lot of work over the last couple of years to open up access to payment systems. That really helps challenger banks and other payment service providers to enter the market and compete.

We have looked at the question of whether it matters that the big banks own and control the payment systems, and our conclusion is "yes." Again, that is about changing that and bringing more competition into that market. In terms of innovation more widely, we absolutely recognise that not all innovation in payments needs to be collaborative and indeed should be competitive. That is why we spend a lot of time differentiating between what needs to be collaborative, so is in the strategy forum remit, and what can be driven commercially. There our role is to make sure there are as few unnecessary barriers to innovation as possible.

Chair: We are very pleased that you exist, which we could hardly not be given we recommended that you be created. We are very concerned, of course, to make sure the consumer is properly protected, so we are going to keep a close eye on your work in the months and years ahead. Competition is crucial, and Chris Philp is going to move in further on that area.

Q8 Chris Philp: You said a moment ago that you did not think that banks having an ownership monopoly was appropriate, yet they do effectively own and control BACS and Faster Payments. How do you reconcile the statement you made with the reality of bank ownership of those two particular systems?

Hannah Nixon: We have undertaken a thorough piece of work over the last 18 months that looks into the question, "Does the ownership by the big banks of those core interbank systems matter?" The answer that we came to and we published back in July last year was that it does matter and the fact that the big banks own and control the interbank systems is hindering competition and innovation. That is why we have put out three remedies that are designed to change that. The key here is getting competition into the provision of infrastructure to BACS, Faster Payments and LINK.

VocaLink hold that contract at the moment. It has not been out to competitive tender. We want to make sure that going forward it does go out to competitive tender, which is why we are putting in a remedy to make that happen. There is then a question about how you make that competitive tender as effective as possible, and there are two things we think need to happen to do that.



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The first is that we want the UK systems to move to international standards, which really opens the market for would-be providers. Secondly, we want the big banks to divest their ownership of VocaLink so that there is no perception or real bias in terms of choosing a particular provider.

Q9 Chris Philp: Are you comfortable that the proposed purchase of them by MasterCard will achieve that objective?

Hannah Nixon: We said in the summer that if MasterCard were to purchase VocaLink that would meet our criteria of divestment by the big banks by definition. We also said, though, that there may be wider competition concerns.

Q10 Chris Philp: Are MasterCard themselves sufficiently independent of their own vested interest?

Hannah Nixon: We said there might be wider competition concerns. The ones we particularly highlighted at the time, which was a question because actually the merger was only announced a few weeks before our decision, was a question around the contract with LINK that they have. The CMA is the relevant merger authority here, so it is their decision to look at the merger.

Obviously they were keen to draw on the work and understanding that we have built up in what is a complicated market over the last couple of years. We did work with them closely to help them and we shared the information we had found. I was not surprised to see that is where they had focused, and doubtless you have seen their statement this morning that they are inclined to accept undertakings from MasterCard, which they will consult on.

Q11 Chris Philp: The CMA is minded to accept it.

Hannah Nixon: Yes. The CMA is the merger authority; it is their decision.

Q12 Chris Philp: You mentioned at the beginning that your review found that bank ownership of BACS and Faster Payments did pose potential competition issues. Can you briefly summarise what those competition issues were?

Hannah Nixon: What we were concerned about is that the infrastructure had not been out to tender. VocaLink have always been the supplier, and introducing competition in a market might mean that we see much more innovation and much more focus on the end consumer going forward. That is what we wanted to achieve: it is making sure we are testing that market.

Q13 Chris Philp: When you talk about competition, I think you are talking about a competitive tender for what is a monopoly service and single provider. You simply have a competitive process to decide which single body provides that service. Is there any way that you could have



potentially more than one provider?

If you had a set of common standards—in IT you would call them APIs—which specified the nature and the form that payment messages were sent in and received from, you could have more than one provider, provided that they were working to a common standard. Rather than having to put out to tender a tender frame monopoly contract, you could have more than one provider competing simultaneously. To facilitate that you need to have common set of standards, but have you investigated that? Is that possible?

Hannah Nixon: Yes, we have. You are absolutely right that today there is just one provider, and as a minimum we want to make sure that there is competition for that market. We are pushing the industry increasingly in the direction that would enable competition in the market.

Q14 **Chris Philp:** More than one provider at a point in time. That is real competition, is it not?

Hannah Nixon: Yes, and that would be the ideal situation if we could achieve that.

Q15 **Chris Philp:** Is there any technical impediment to doing that?

Hannah Nixon: Technology is moving on in a way that will help this. The other point that is crucial here, which you mentioned, is having these open and common standards, which is why we want the industry to move on to international standards. That is why we are streamlining the payments systems operators, so they all come into one language, if you like, and one set of standards. If everybody is then providing infrastructure that adheres to those standards and those sets of rules then over time we could see multiple infrastructure providers emerge.

Q16 **Chris Philp:** When you say “over time”, can you put a timeframe on that for us?

Hannah Nixon: The current VocaLink contracts are in place until around 2020, so we want to make sure that at that point we are going out to competitive tender, at least for a single one.

Q17 **Chris Philp:** I was asking about a timeframe for a situation where you might have multiple providers operating simultaneously, which is real competition.

Hannah Nixon: Yes, absolutely, I agree with you; that would be an even better end state to be in, which is why we are pushing in that direction.

Q18 **Chris Philp:** What is the timing for that?

Hannah Nixon: It could happen this time around, but my sense is that it will be a little bit further out than that.

Q19 **Chris Philp:** 2020: that is still four years. Mr Griffith-Jones, would you agree that to have real competition you need to have more than one



provider simultaneously operating. If you do agree, do you think it should be a priority to try to make that happen by 2020, by the time the current contract is up, not as a, "We might do it", nice-to-have, but as an essential objective?

John Griffith-Jones: It is desirable, if it can be achieved. The question is, "Can it be technically achieved given all the other requirements of security and reliability of the service?" We are moving. We have got a heavy-lifting job to be done here, first of all to get this out of the control of the banks, then to get it under the control of MasterCard and then to do the tender for the services. There is quite a lot to be done, and although four years sounds a long time—or three years—I am with Hannah: I do not think we should say, "We must have that", and risk not having anything as opposed to, "We must have the tendering and help technology get us to multiple providers."

Q20 **Chris Philp:** Do you have in mind a long-stop end date? You are suggesting that 2020 might not be achievable. Do you have a long-stop date by which you will absolutely insist this is done, or that you think we should collectively insist it gets done by?

Hannah Nixon: What we are trying to do here is put in place a framework that enables this competition to emerge.

Chris Philp: Unless you have a date and a plan, it will never happen.

Hannah Nixon: There is absolutely a plan to bring in the new set of infrastructures, streamline the systems, put in the common messaging standards and so on, so that those tenders can happen effectively when the VocaLink contracts come to an end.

Q21 **Chris Philp:** I am going to have to pass over to a colleague in a moment. I would just suggest it is important to have multiple people providing a choice of service. I accept it is not a straightforward thing. I accept it needs common standards and is not the kind of thing you can do overnight, and certainly should not be done at the expense of security or reliability.

However, I would urge you to develop a plan that gets there with specific steps, there are a number of intermediate steps, with dates against each of those and a target end date. It may be that that target date is later than 2020, but having that date of 2024, or who knows what, with clearly identified intermediate milestones, would give clarity and then would let you and indeed us measure progress against that plan. The plan should go right to the end with dates against each step. Is that something you will be able to commit to doing?

Hannah Nixon: We have a detailed plan in terms of getting us to the next stage. The only bit that is not there that you are asking for is an end date on when we have competing infrastructures. There are still questions around that, which will need looking at in terms of the economic viability of that in the UK market. That is a direction that we



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are pushing in. There should not be any impediment to that happening, even by 2020.

- Q22 **Chris Philp:** That brings us on to my final question. Have you looked at how payment systems operate in other developed western countries: the USA, Germany, France, Japan and so on? How do they operate their payment systems in comparison to ours? Finally, related to that, is there any evidence that the UK operators are making excess profits either when considered in absolute terms or when compared with the profits made in other countries?

Hannah Nixon: We have looked at other countries. In fact, we did a study of 13 other countries around the world and the UK compares pretty favourably in terms of performance, reliability, technology and so on. It is also clear that other countries are now catching up, which is why we cannot be complacent.

- Q23 **Chris Philp:** How do prices compare—the price of making a payment here compared with, say, the USA or Germany?

Hannah Nixon: Certainly, the schemes here are not for profit. The schemes themselves are not making money here.

Chris Philp: By design they break even.

Hannah Nixon: By design they break even.

- Q24 **Chris Philp:** How do the charges compare: the cost of making a same-day payment in the UK compared with the cost of making a same-day payment in the US if you are a company or a bank? How do those charges compare?

Hannah Nixon: Again, the UK compares pretty favourably. I do not have the exact numbers to hand.

- Q25 **Chris Philp:** Are there any developed countries in the world that have more than one payment system in simultaneous operation?

Hannah Nixon: In infrastructure terms, the EU is moving in that direction. Australia might also be moving in that direction.

- Q26 **Chris Philp:** Is anyone currently doing it?

Hannah Nixon: Not that I am aware of, no. I would need to confirm that to you.

Chris Philp: Let us be the first.

- Q27 **George Kerevan:** For the record and for people listening in on television, can you confirm that the present VocaLink system provides the technology and processes about 90% of the salary payments, 70% of household bills and all state benefits? Can you confirm that?

Hannah Nixon: Yes.



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Q28 **George Kerevan:** Can you also confirm that, if it goes ahead, the United States corporation, MasterCard, intends to buy that system and own it outright?

Hannah Nixon: VocaLink provides that service to BACS under contract, so, yes, MasterCard would own that contract.

Q29 **George Kerevan:** Are you aware that MasterCard probably has more anti-trust suits labelled against it in the United States in modern times than any other company? Are you aware that it has faced repeated US Department of Justice anti-trust suits and that it has had to pay out multiple billions of pounds when lawsuits have been found against it, including its attempt to block issuing banks having relationships with other payment systems?

Hannah Nixon: I am aware of the cases.

George Kerevan: You are aware of them.

Hannah Nixon: Yes.

Q30 **George Kerevan:** Against that background, and given the fact that your project to introduce competition in the delivery of payment systems is some way off, do you not think that you are in breach of your statutory duty to encourage competition in the payments system by letting this monopoly control take place?

Hannah Nixon: The CMA is the merger authority here.

Q31 **George Kerevan:** But you have a statutory duty to encourage competition, do you not?

Hannah Nixon: Absolutely, but we need to go back to what we are trying to achieve here. Through the infrastructure market review that we conducted, we were very clear that there was an issue with big banks owning the payments infrastructure.

George Kerevan: Now it is going to go into a monopoly.

Hannah Nixon: The important part of this is that when the VocaLink contracts break they will go out to competitive tender. VocaLink, MasterCard and all the others will have to rebid for those contracts. They will rebid on an open playing field. If they are not the best then they will not be winning those contracts.

Q32 **George Kerevan:** To Mr Griffith-Jones, let me try to explain my concerns in a question. In the medium term, you hope to put a competitive tender structure in place. I understand that. This month what has been admitted is that 90% of all the salaries in this country are going to be paid by this existing system, which will be here for some years. All benefits payment will be subject to payments through this system. The provider of this technology and the operator of this system is about to be bought by what would then be a single monopoly owner with multiple anti-trust suits against it.



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We also know that in the last few years the European Union and the European Central Bank have voiced concerns and taken action. The reason why the EU is moving towards multiple competing systems—and this is coming from the ECB—is because of the alleged criticisms and anti-trust actions of MasterCard in continental Europe.

Against that background I put it to you, if your statutory duty is to encourage competition, you cannot look at that in some abstract way where eight or 10 years from now we will solve the problem. The here and the now is that this month payments are likely to end up being made by a monopoly supplier with a track record of anti-trust violations. Does that not in some sense give you concern, given that your statutory duty is to encourage competition?

John Griffith-Jones: The nature of MasterCard and its track record that you cite is well known. The key issue is in order to get more competition into the banking system generally, we have concluded, through our infrastructure market review, that we have to take ownership and control of the systems away from the banks. That means we will need to sell it. That is what we believe, having thought very carefully about it.

Q33 **George Kerevan:** To a monopoly with anti-trust violations galore.

John Griffith-Jones: With respect, it is no more of a monopoly than it is at the moment. It is owned by the big five banks and we are taking it out of there and putting it somewhere else. The benefit of that—

Q34 **George Kerevan:** What is the benefit in the next five years?

John Griffith-Jones: The benefit—and this is how the theory runs—is that we open up the banking system at large to the challenger banks and other new entrants. That is the key to having an effective banking system. They will all have to run on the system. They will all run on the system at least until 2020, as we have just discussed with Mr Philp.

There is a contract in place until 2020, so the prices and all that are set. It is being run still by VocaLink, and VocaLink is now owned by MasterCard, but it is a contract that is in place and it will be tendered. It is a monopoly once it is won, but it has to be tendered, and if MasterCard wish to put their prices up or change the deal, they will have to tender against other competitors.

Q35 **George Kerevan:** Why do you think such a hard-nosed company as MasterCard is prepared to buy the VocaLink system with three years until the end of the contract?

John Griffith-Jones: You would obviously have to ask them, but I do not think it is for the reasons that you are suggesting. I suspect that they see a tremendous opportunity to sell the systems around the world and to develop the MasterCard proposition in a broader sense. The technology and the access and the know-how that this brings them are very valuable.



Hannah Nixon: We have competition powers ourselves, which means that we have a very keen eye on how the market is developing. If there were to be anti-competitive behaviour here by anybody, then obviously we would be taking action, but those contracts are in place until 2020, and MasterCard has said that they will honour them.

Q36 **George Kerevan:** I understand that, and I understand all about closing stable doors when horses have bolted. Would you consider asking the CMA at this moment, given the concerns that there are, to use its statutory powers to extend the period? It has a two-month period before it needs to, if it wants to. The CMA could delay approval of the sale for two months so that you could have further investigation, so that you were satisfied. Would you possibly think of that?

Hannah Nixon: We have worked with the CMA, as I say, over the last few months since the merger was on the table. We have built up a lot of understanding of the market—and it is a complicated market—over the last couple of years and we have shared that with the CMA. As I say, from our point of view it does meet the requirement of the banks divesting their stakes in VocaLink.

Q37 **George Kerevan:** To a monopoly. How does that meet a requirement for competition?

Hannah Nixon: The CMA has investigated a much broader range of potential competition issues in relation to this merger. They concluded that the one area they did have questions about was the LINK contract. We have seen today that MasterCard has offered up some remedies in that area that the CMA will consult on. They need to go through their process.

Q38 **George Kerevan:** A final question, on a more positive note: let us suppose that the proposed sale to MasterCard fails. What would you do then, or what did you originally envisage doing to proceed with the divesting of the ownership by the core banks?

Hannah Nixon: We have been absolutely clear that if that merger does not go through, for whatever reason, we will pursue the divestment remedy, so we will require the banks to divest their ownership of VocaLink.

Q39 **George Kerevan:** I am looking at the architecture of that because clearly they are divesting in the narrowest sense of selling it off quickly to MasterCard. Would you, for instance, use your powers to create a standalone vehicle that allowed all UK banks, including the challenger banks, to have a partial ownership of the system? That is what they originally wanted, which is now blocked off by the MasterCard sale.

Hannah Nixon: It is certainly an option. We looked at that. The concern we would have is what we are doing is trying to open this market up to competition. We want a competitive tender. If you have got one of those bidders owned by all the users of the system there would at least



be a perception of a bias there. My concern is we would not see as effective competition as we would have if that bidder was owned by people that are not users of the system. What we want to see is a level playing field when that tender comes, and to do that we need divestment by the banks.

Chair: You should know that when George Kerevan is wearing that tie he is likely to be at his most waspish. I also hope that you are taking on-board that we are pretty serious about competition. We did not put it there as an afterthought in our report and then press the Secretary of State to make sure it was in your statutory objectives. We mean it, and we are going to keep a very close eye on whether you are providing it.

- Q40 **Mr Baker:** Good afternoon. I must begin by declaring an interest. I have a shareholding in Glint Pay. It is a start-up and the total value still falls below the declarable threshold for the House, but nevertheless, for the purposes of the Committee, I need to declare it. You began by setting out your priorities: access to infrastructure and innovation. It is really that which I would like to focus, but first I would like to pick up on George Kerevan's questions. It seems to me that what we are doing is moving the payments system over to what I might be allowed to characterise as a regulated monopoly, and you have great confidence in your ability to regulate it to a satisfactory degree. I wondered whether you had considered something like a co-operative. If one of the problems is that it has been owned by five big banks, therefore to the exclusion of others, I wondered whether the payment system could be owned in an open and collaborative way as a co-operative. Is that something that you considered or would consider?

Hannah Nixon: We did consider it, and what we are trying to do is get as much competition into the system and as many points in the system as possible. Having tested that infrastructure market we felt it was possible to have competition for the market as long as we had a level playing field, hence the requirement to tender but also the requirements to move to open standards and to divest the ownership. We could have the co-operative model, but I think you would lose the dynamics and the benefits of a competitive framework.

- Q41 **Mr Baker:** Explain why you would lose those benefits, because it seems to me if you had an open framework with many players able to own the system, and if they had equal voting rights not connected to an equity share, as is the practice in co-operatives, it would become possible for the large number of start-ups that are emerging to drive the payment system in an appropriate direction. Why do you need the kind of competition that you are seeking when progress might have been driven by equal ownership through a co-operative? I am not sure where the benefit is lost in this particular case.

Hannah Nixon: We wanted to introduce competition because by being clear with what you want from the system but then putting out to tender how that is delivered, you should drive innovation. That gives you



potentially more functionality, potentially cheaper prices and you are making sure that it is keeping up to the forefront of technology change, and we know that is changing very fast at the moment.

The co-operative approach is possible, but there is always the question about who is the next person who wants to come in who is not in at the moment, how they break into that, and how you are making sure that that incumbent group, and everybody who enters does of course become one of the incumbents, has got their hand on the button of the next wave of innovation. Hence we wanted to open this market up to competition. We did look at the co-operative approach, but we felt this was—

- Q42 **Mr Baker:** I am thrilled that you did look at it. I will leave it here, but it occurs to me that the whole specification of the worldwide web is designed by open collaboration and standards process and it works pretty well. People then compete on the services they offer on top of it, and that is why I raise this point.

Hannah Nixon: That is important. It is a related issue and is exactly the way we are going, and I would see the web, as you have highlighted, as an interesting parallel. What we are trying to do is say, “What do you need at the centre that you need to collaborate on, which will open up competition everywhere else?” Where we have got to is what you really need at the centre are common rules and standards, maybe some common infrastructure, at least in the early days, and then everything else is layered on top in competition. That is exactly the model that we are moving to. That is exactly the new architecture, but then that means you have competing and privately owned infrastructure.

- Q43 **Mr Baker:** I am slightly conscious that I am not asking you the questions that I am meant to. I am just trying to imagine how the world wide web would have developed if, instead of allowing interests to collaborate with one another to put the infrastructure in place, a regulator had specified what needed to be done and then asked large bureaucratic monoliths to compete to take on that problem. It seems to me that in the end it boils down to quite a different model. There is a vibrant and dynamic collaboration on the merits versus competition to take on a giant problem, and you do not know whether they will be able to solve it until they tried. It seems to me there are two quite different methods to try to make progress.

Hannah Nixon: What we are trying to achieve—and maybe I am not being sufficiently clear here—is putting competition into as many parts of the chain as possible. We know that payment systems need to talk to each other, and so there is going to be some element of collaboration. The work of the forum is really looking at what it is you need to collaborate on to enable that competition elsewhere. The model that we now have – it is a strategy in the implementation phase – is working towards having those common standards and streamlining those so that that work across all the systems. At least in the first instance you have a common backbone infrastructure, but, as we have discussed, that might



move to competing infrastructures at the time. Services then come in, use that backbone and put layers on top and compete. That is what we are moving towards, but what we have had to do, the model we have used to get to that point, is the strategy forum model of bringing everybody round the table and tasking them with solving this problem which they now have an answer to, over the last year.

- Q44 **Mr Baker:** The Chairman asked you a little earlier about the Payments Strategy Forum, and you gave us a good description. To what extent are the real disruptors involved in that strategy forum? I am thinking about people like the UK Digital Currency Association and their members. Are they involved? We have got this sandbox project that we will come back to. Are these really disruptive technologists involved in your strategy?

Hannah Nixon: We do have FinTech involved as members of the forum, and we do have the payments community, which is 500 people. That is open, it is not limited, but there are 500 members at the moment. Absolutely we want to have those disruptors in there in terms of highlighting what is possible and what the barriers to that are at the moment. The solution that the Payments Strategy Forum has put forward is technology-neutral at the moment. We expect the technology solution to come through the bid process. The bid definition would be neutral on technology, and if there is a crypto or distributed ledger bid there then obviously that can be thrown into the pot too.

- Q45 **Mr Baker:** What are they telling you about barriers to entry?

Hannah Nixon: One of the things we have heard is that it was very difficult to get your voice heard before, because it was effectively the big banks that were running this. That has changed, and we see very active engagement across the piece. If you are a would-be infrastructure provider you have not had an opportunity to provide infrastructure into the UK because this has not gone out to tender. Again, the fact that this will come up is seen as positive.

The fact that we want to open up competition as much as possible and keep the standards part as streamlined as possible is also seen as a positive, because it means that you can compete in a UK market in ways that you cannot today. What we are doing is opening this up to a much greater population in terms of people that could compete here.

- Q46 **Mr Baker:** I am slightly conscious that digital currencies will carry on; they just need the internet. They do not need the infrastructure that you are putting in place, so I am wondering how much relevance they have to what you are trying to do in that strategy forum. Do you end up having a conversation in that strategy forum that in many ways is not relevant to a new kind of money that simply uses the internet and does not require the more old-fashioned infrastructure?

Hannah Nixon: Technology is moving very fast, and we are really conscious of that. We need to make sure that we are technology-neutral in that sense, so we are not picking winners. The distributed ledger is



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completely relevant here. We would not pick a particular technology, as I say, but what we would want to see happening with a tender is a specification of what is required from the payments service and the payment infrastructure. People would then bid against that.

If somebody has a distributed ledger solution to that and wants to bid in that process then they could do so. We obviously joined up with the Bank of England as well. They would need to be happy from a resilience point of view, but there is nothing we are doing here that prevents that being the outcome.

Q47 Mr Baker: Are you participating in the FCA's sandbox to help innovators develop their products?

Hannah Nixon: Yes. We are very joined up with the FCA. A lot of the initiatives we see going through a sandbox are related to payments, so obviously we are involved in that.

Q48 Mr Baker: John, would you like to tell us a little bit about how the FCA sees that sandbox being useful strategically to the overall purposes of the organisation?

John Griffith-Jones: Clearly, for the FCA it is not just payments. It is indeed the case that a great many of the people coming forward have got possibly not the whole system but add-ons to the system that they are very keen to be able to plug into the architecture that we have now, or that we are going to have now going forward. We are selective—and by “we” I mean the FCA, I should emphasise—as to how many we sponsor. I have not got the figure in my head but I think it is in the teens or in the 20s.

There are decisions being made as to who to sponsor through the sandbox and why. The criteria is based on the benefit to the consumer and the size of the prize, so they vary from some very large organisations with some quite good ideas or very good ideas to some start-ups with equally good ideas. It is very early days. We have the first cohort running at the moment, so rather than boast that it is all going to work terrifically well, I would rather establish a track record.

Q49 Mr Baker: This is innovation on your own part as a regulator, is it not, to make this sandbox available?

John Griffith-Jones: Yes, sandboxes are quite contentious, because what essentially the innovator wants is the permission to go ahead without proof that it definitely works. The theory is that you are allowed to do that with real customers but in a controlled environment such that if it does not work the customers get compensated, and we have the confidence that the people will be around to compensate them all. Hopefully, they would not lose money but if they are inconvenienced they would get sorted out.

Q50 Mr Baker: It occurs to me that all of these innovators will not be able to



proceed unless they can get bank accounts. It has been brought to my attention that it is becoming rather difficult to obtain multi-currency safeguarded accounts. It is a phenomenon that does not affect just one company. It will be a phenomenon for all these firms that there might be a catch-22 emerging, where it is difficult to get the account until you have a turnover of several million pounds. Of course you cannot get the turnover until you have the account.

Is that something you are aware of? Have you had complaints from these sandbox firms that they face non-payments and non-technical barriers, which are emerging from the regulatory system that prevent them starting up and making progress?

John Griffith-Jones: I am not personally aware. If we became aware, it would be well within our scope to intervene or to ascertain what was going on, because clearly if we want to promote innovation we have to take all the barriers out, not just some of them.

Q51 **Mr Baker:** It is good to know that you want to do that. Finally, with that in mind, where do you see blockchain going? Where are we on the hype curve with blockchain and distributed ledgers?

Hannah Nixon: So, it is one of those really interesting technologies, and distributed ledger had huge potential, but as a regulator we are not here to pick the winner or pick the technology. What we want to do is open this market up so that the right ideas can come forward and prevail. That is what we are trying to do.

Q52 **Chair:** Take a moment to explain distributed ledgers, because I am not sure I understand.

Mr Baker: They work by magic, Chair.

Chair: Let us have an explanation from the regulator.

Hannah Nixon: I do not pretend to be an expert on distributed ledger, but they are electronic. Everybody holds an electronic version of the account and nothing is reconciled until everybody agrees. There is huge power and potential in that. I do not personally pretend to be an expert in that. What I want to do is make sure that we have an industry setup and a regulatory setup that allows those technologies to develop. The ones that are successful and will be proven will be the ones that come forward, and we want to make sure we have an environment that supports that.

John Griffith-Jones: Chair, there is some very interested usage being developed in the wholesale markets, where you have, say, 20 players from big investment banks, who at the moment have very complicated settlement procedures. If a distributed ledger with only, as it were, 20 players, a sort of closed loop, but run on the new technology can be made to work, the potential for genuine savings, taking out all these people trying to reconcile items, is very significant, and there is a lot of



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money and effort being delegated to this problem. That is an easier concept as a proof of concept than opening up the whole of the UK retail payment system as the first use of blockchain.

If you wanted a guess from the regulator, it is that people would successfully use it in a more controlled environment first, and if it was proved successful and could be made to work you would see it being deployed more widely. By the way, it is not just for financial services; it has potential applications in many other industries.

Q53 Rachel Reeves: In the last year, £1.9 billion of transactions have been made through contactless cards, and that is up 232% on the previous year. My questions today are about the ability to use those cards fraudulently. At the moment when transactions are offline, which most contactless ones are, if the card is being used fraudulently that will not be picked up until the end of the day. I wondered whether there is any reason why banks cannot implement some sort of simple fix, whereby even with contactless payments cancelled cards are automatically refunded, for example, if you use them.

Hannah Nixon: I am absolutely aware of this problem. My understanding is it is an issue with the individual banks' IT setup. This is an area I am aware the FCA has looked at.

John Griffith-Jones: That was the responsibility being passed to the FCA, which is indeed correct. It is an FCA responsibility to deal with contactless fraud of the sort that you are describing, and we take that seriously. We did a piece of work on this, I understand—and I am aware you were on the radio as I was traveling on the train up this morning, so I am afraid I do not have the full details—in 2015, and we concluded at the time that, broadly speaking, anyone who was the victim of this particular scam, or at least their card was being used after they had lost it or it had been stolen, were being reimbursed in line with the payments systems regulation, that essentially says that unauthorised payments have to be reimbursed by the bank to the holder of card. That was 2015.

Now, this has obviously grown almost exponentially since that time, and we are actively looking at this with the banks to ensure that consumers are protected. I am afraid I do not have an answer as to whether it is technologically possible to, as it were, cancel the cards midday as opposed to reimbursing people at the end of the day.

Rachel Reeves: What happens at the moment is if I had my card stolen and I phoned up the bank of the Chair and told him that my card had been stolen, and it turns out that Steve Baker has stolen my card—this is all hypothetical.

Chair: You will notice that Conservatives were fingered for it.

Rachel Reeves: Anyway, Mr Baker then uses my card to make a contactless payment for £5 that day. That goes through because it is an



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offline payment, so it is not until the end of the day that the bank of Mr Tyrie knows that that card has been used in that way. Now, it is my card and I have already reported that it has been stolen, so I am assuming from now on that my bank has cancelled my card and that Mr Baker and others are not able to use it. The problem is that I am not informed as a customer that that is not the case, and that my card can still be used by the person who has stolen it for offline transactions.

What happens is that if the card is used in that way then it is still up to me, as the customer, to check through my statements and report any additional fraudulent activity to my bank, even though the bank knows that card has been used. The vast majority of banks are not telling their customers when their card is used and relies on me going through my statements and picking up what is fraudulent. That is sometimes difficult to do, because I might have shopped in a supermarket that day and the person that stole my card might have also shopped in the supermarket. It is difficult to tell, especially when it is for a low amount of money, that it is a fraudulent transaction. What role does either the Payment Systems Regulator or the FCA have in telling banks that that is not acceptable and that, once I have reported my card as stolen, it is the responsibility of the bank to stop that card being used or to reimburse the customer?

John Griffith-Jones: My understanding is it is already our responsibility to do that. My understanding is that the work we did in 2015 broadly said that was what was happening, i.e. that people were being reimbursed automatically.

Q54 **Rachel Reeves:** That is definitely not happening. There was a customer recently who, eight months later, found out that his card was still being used. He phoned up the bank, which said the card could continue to be used until the expiry date on the card and that he should carry on checking his statements and let the bank know. Do you think that is acceptable?

John Griffith-Jones: That is clearly not acceptable, and I wish I was sitting here having had time to get confirmation that that is not supposed to happen, but I am pretty sure that is the case. If I may, I would confirm it to you once I have got back to the office this evening.

Q55 **Rachel Reeves:** That would be very helpful. In terms of, Ms Nixon, the role of the Payment Systems Regulator, one of your objectives is to ensure that payment systems are operated and developed in a way that considers and promotes the interests of all the businesses and consumers that use them. Obviously, in this way, there is a consumer detriment here. Is there a role for the PSR for looking at this and ensuring that customers are treated fairly and getting what they would expect from the bank?

Hannah Nixon: That is clearly one of our duties we should take very seriously. We recognise that there is an issue here, but this is an area where the FCA does clearly have jurisdiction. Our role is over the



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payments system. This is an issue about the banks that are attached to either end of that payment system, and the FCA does have jurisdiction here and is taking that work forward.

Q56 Rachel Reeves: So would it be okay, Mr Griffith-Jones, if you write to the Chair?

John Griffith-Jones: It will be an FCA letter, which I think is the logical thing for it to be because that is where the responsibility for this lies.

Rachel Reeves: That is fine with me. I think that because the contactless system is such a growing part of payments, people do need to have that assurance that their bank accounts are not being used fraudulently in this way. If the growth of that part of the economy continues at its current rate there is clearly a risk for large-scale fraud, so I look forward to your letter.

Q57 Chair: One of the issues we have discussed in the past is related to this, Mr Griffith-Jones. There are incentives on the banks to identify and crack down on fraud, which are of course, once found, liable for a good proportion of it, possibly a high proportion of it, in reimbursement, which is the point that we were discussing.

John Griffith-Jones: Which is what should be happening in this case.

Chair: A good deal of fraud goes undetected altogether, and fraudsters are very skilled now at finding ways to take small amounts over long periods of time. One of the points that I have raised with you in the past, both privately and publicly, is about whether you are confident the incentives on banks are strong enough to encourage them to put in place systems that are resilient to fraud. Are the banks not in a position where the trade-off between extra expenditure and the level of fraud is one that is not pitched at a level a consumer might be prepared to consider acceptable? Are you looking into this issue and what have you found?

John Griffith-Jones: This touches on the super-complaint that Which? made to the PSR, but, again, it crosses the boundaries of the two organisations. I certainly am not complacent about it. Indeed, we are constantly on inquiry. The basic law, as it stands, is very clear: that the banks absolutely have to reimburse where it is unauthorised.

Q58 Chair: We have been asking you whether you think that is the right balance, not just saying, "That is the law so that is what we are going to do." What I want you to do is examine whether we have got that balance right.

John Griffith-Jones: We have been examining this, as it happens, in the context of the super-complaint, and various things have emerged. I might hand over to Hannah for the detail, but there are several issues arising. The first is that this is a growing problem, which is not entirely surprising because of the increased use of technology.



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The second is it is devastating to the consumer concerned, particularly in these very high-profile cases. They are actually quite large sums of money, or very large relative to a person's wealth, such as the deposits on houses being steered to fraudsters. It is really important that we minimise the incidents of this happening as opposed to tolerate it, and that is what we are trying to do. It is not so straightforward to achieve that.

Chair: No, that is why we have a regulator.

John Griffith-Jones: Yes, exactly. There are technical barriers. The fraudster is always looking for the weakest link the chain. That is their motive, and as we introduce new systems and as the technology moves on, essentially they look for the next thing. It is unfair to say the banks absolutely should be able to spot all of these before they happen.

Chair: I have not suggested that at all.

John Griffith-Jones: For them to react and close them down as soon as they do is important. Indeed, as a result of the super-complaint work, although there are various measures being taken, one of the most important is our urgently looking at the question as to the Financial Fraud Action group coming back with some specific proposals.

Q59 **Chair:** Can I go back to the question I asked you, which was whether you are happy having looked at it, if you have looked at it, at the balance that is current being struck by the banks between the amount they spend to clamp down on fraud and the amount that at the moment appears to—

John Griffith-Jones: I certainly would not use the word "happy". We are absolutely on enquiry about it, but we are not just on enquiry and hoping for the best; that is what I am trying to get across.

Q60 **Chair:** A related question that we also have raised publicly and privately is, although it is very difficult to do, what estimate you think is reasonable for the amount that may go undetected. That is where payments are not in the end made by banks in compensation because nobody ever finds out.

Hannah Nixon: Perhaps, if I just add, this is an area that the PSR has been working very closely with the FCA and the Bank of England on. To be really clear about how the responsibilities fall, where there is a resilience of payment systems themselves, it has always sat with the Bank of England. The resilience in terms of the actual banks that connect to that is obviously a supervision issue for the FCA.

The Which? super-complaint that we got in September last year was actually really welcome, because what they did was highlight a growing issue, which is driven by a change in technology in terms of people being defrauded out of money. The work that the PSR did over that 90-day period that we had to look at it highlighted a number of things. First, in relation to the size of the issue, the data just is not there.



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Chair: No, of course not. You have got to go away and find ways of using survey data and other indirect ways to try to obtain an estimate.

Hannah Nixon: We did.

Chair: You have done that.

Hannah Nixon: Yes. We went out to banks to gather the information they had, and it was variable. We did our own survey data and we also had information provided to us from Which?. From that we managed to get a picture that says this particular type of fraud that we are looking at, which is around people being scammed into paying people accidentally, is a growing issue. Tens of thousands of people are affected every year and millions of pounds are lost. Individuals can lose a lot of money and it can be devastating to them.

What we have not done is build up that clear picture because banks are not collecting that data. We need to change that, but we also need to make sure that the banks are doing everything they can to stop this happening in the first place and make it really difficult for this kind of crime to be perpetrated.

Q61 **Chair:** I am sorry; I want to focus on the question I am asking. There are only two questions and they are quite precise questions. The second question I was asking is what you began to answer and then moved away from it, because you were only answering it with respect to a particular form of scam. I am asking you as the regulator to go away and start to think how much may, as a reasonable guess, be being extracted from bank accounts that is not detected, and, therefore, not reimbursed.

We would like an estimate of that, please, as Parliament. We would like you to give us an answer. It may take a long time, and it may have to be a range, and there will have to be all sorts of provisos. Armed with that, we would like you to give further thought to the question, "Are you sure that we have got the balance right?" That is the balance that I was describing in the first question I asked, which was the first point that I raised with you.

John Griffith-Jones: We will be happy to give you the estimate or our best estimate of that. As I say, the work that we are talking about is a significant—

Chair: To put it in another language, in an economist's language, although it may not be apparent, there may be moral hazard for the banks, who do not have such an interest in flagging all this up as would be considered reasonable by a wider public.

Q62 **Kit Malthouse:** I will just draw the Committee's attention to my business in an originator using the direct debit system. On the super-complaint, Mr Griffith-Jones, you said that people are covered by law, but I thought the reason for the super-complaint was that there was a section of payers that are not covered by the law for reimbursement. If I am defrauded on



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my credit card, they have to pay me back. If I am defrauded using my bank card they have to pay me back, but if I make a direct payment to a fraudster I am not covered. The bank does not have to give me the money back. That is right, is it not? That was the subject of the super-complaint: that particular form of payment.

John Griffith-Jones: Yes.

Q63 **Kit Malthouse:** I guess the question is whether you think it would be appropriate for that form of payment to fall in line with the other two forms of payment.

Hannah Nixon: That is exactly the work that we are looking at. We had 90 days to look at the super-complaint. In that time we built up a very clear picture, and what we have done now is kick-start an industry-wide piece of work to address that. One of those pieces of work, which the PSR will be taking forward, is looking at whether there is anything the payments system itself could do. One of those options is to look at the credit card system to see if that would be appropriate here. That is work we are doing.

Q64 **Kit Malthouse:** One of the issues that I have had brought to me from my constituency is where a business had paid quite large sums of money, into the tens of thousands of pounds, on a kind of fraudulent email and invoice to a bank account that is then completely emptied and shutdown. The question is about their fault but what the original counter-party bank was doing allowing this account to be opened, filled, emptied, and then shut down so quickly. Is that where you think the burden of cost should lie: with the counter-party bank rather than the payer's bank?

Hannah Nixon: We need to do the work. It is really important that we differentiate between the paying and receiving bank. We have highlighted that. There are a number of moving pieces here. What we discovered in 90 days is that there are no silver bullets here. There are a range of things we want to look at; that is why that is something we are doing.

The FCA has committed to looking at whether there is anything that it needs to do, including on the issue you just highlighted. The industry is also committed to looking at whether it can share information better so that it can identify and close down mule accounts more effectively. There is a whole range of things that we want to look at to make sure we can do everything that we can to minimise this problem.

Q65 **Kit Malthouse:** Some of this is incredibly sophisticated. I have to tell you in my business they tell me we get two or three of these things a week and that is relatively low compared with some. Some of them, would you believe, are masquerading as me. God knows how they manage to. I think they go to Companies House and work out who the directors are. I am commonly known as Kit but my legal name is Christopher, and they get these emails from Christopher Malthouse, and that is how they twig it is not me. It is a huge and growing problem.



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When do you expect to conclude your work on it?

Hannah Nixon: That work has already started. The work that we are doing we will undertake this year. The industry is committed to doing its work over the next six months. Obviously, we are monitoring that in real time.

Kit Malthouse: So six months.

Hannah Nixon: Yes, six months. We said in the summer we will set out an update on where everybody has got to.

Q66 **Kit Malthouse:** I wanted to ask you about the evolution of cash. I know this has come up in the last few years, but do you think cheques have had their day? What would the saving be to the banking system that presumably could be passed on to customers if cheques disappeared?

Hannah Nixon: The important thing is that banks and payment systems are focused on the needs of all their users. It is certainly true that cheque volumes are declining, and the banks have committed to moving to a cheque imaging system; that will come into operation later this year. That system is being built in a way that can be reused, so if it can be reused that helps drive efficiencies that ultimately are received by the consumers and that is what will happen. As a regulator, what we are trying to do is make sure that the payment systems, in their entirety, are serving the users. We do not have targets for any of the particular systems in terms of users.

Q67 **Kit Malthouse:** Aside from handling bullion, handling cheques must be the second most expensive part of the system, is it not? All those bits of paper flying around.

Hannah Nixon: For the banks, yes. One of the benefits of the imaging system is it will take out that cost for the banks.

Q68 **Kit Malthouse:** Not all the cost, presumably.

Hannah Nixon: Not all.

Q69 **Kit Malthouse:** These books still have to be printed and sent by secure mail. It seems an incredibly arcane system. I am not sure there are many retailers now that accept cheques anymore. What has been the proportional decline of cheques?

Hannah Nixon: I would have to check the numbers but around 12% a year in volume terms.

Q70 **Kit Malthouse:** It is dropping.

Hannah Nixon: Yes.

Q71 **Kit Malthouse:** There might come a point over the next decade where the number is so small you could see them being eliminated from the system.



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Hannah Nixon: The important thing is the banks' payment systems are really thinking about what their users need and making sure that they have options that are useful to them, and cheques are clearly something that are valued by and useful to society today. While that is the case, the banks need to provide that service.

Q72 **Kit Malthouse:** What about cash? Are you doing any work on the cashless society? I think it is Sweden that has said they are going to be the first cashless society in the world.

Hannah Nixon: Our remit explicitly excludes cash. But we do have jurisdiction over the ATM network. Again, we are neutral in terms of payment system. What we want to do is make sure that there is an array of choices that serve the needs of society, so we are not driving a pro or against cash agenda in that sense. What we do want to make sure, though, is that the ATM network is appropriate to serve the needs of the UK.

Q73 **Kit Malthouse:** Do you cover digital cash?

Hannah Nixon: No.

Q74 **Kit Malthouse:** You would not deal with Bitcoin or other digital currencies?

Hannah Nixon: No. The relevance to us of those new technologies is whether they could be potential providers of infrastructure going forward and whether we are making sure that the market is sufficiently open for them to compete. We would not be picking an individual technology.

Q75 **Chair:** I am sure you will be aware of the letter that I have sent to Ciaran Martin of the National Cyber Security Centre. You know about this.

John Griffith-Jones: I am aware you have sent a letter.

Chair: You have not seen it.

John Griffith-Jones: I have not seen the words, no.

Q76 **Chair:** Okay. Although it is in the public domain, I will not ask questions about it because you will not have had time to consider it. I have one last question. By the way, we have got no plans on this Committee to recommend the abolition of cheques any time soon, just to put down a firm marker on that point before we go any further. On competition, you said if you see anti-competitive behaviour, Hannah Nixon, you would clamp down on it. Have you developed a set of tools for trying to spot it and monitor it?

Hannah Nixon: Yes. What we do is make sure we have the right skill sets in the organisation to be able to spot this type of behaviour.

Q77 **Chair:** I was talking about tools to do so and proxies for anti-competitive behaviour that may show up. In many markets you might use supernormal profits, for example, as a preliminary trigger, and there are



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a number of others. Have you developed anything of that type or a toolkit of that type?

Hannah Nixon: We use a standard competition toolkit to look at markets. We have a general horizon-scanning function, which is looking at developments. One of the pieces of work that we are keen that we do in this coming year is to think hard about how competitive dynamics are changing in the face of new technologies, and what that might mean for competition trends and what that therefore might mean for our role. This is something that we do focus on very clearly, and we are aware that the dynamics will change as technology changes.

Chair: It might be helpful, perhaps, if you could provide us a list and description of those tools. I am not asking you for a letter about how you are approaching the general question of dealing with competition. I am asking you, again, a very specific question about what tools, yardsticks and specific measures, usually proxy measures, you are using to try to establish whether a market is competitive in the area for which you are responsible.

Thank you very much for coming in to give evidence this afternoon. I expect it will be the first of further hearings. You are a relatively new body. This is your first hearing as that body in front of Parliament. It is an area of acute public concern that you are operating in, which is why you exist in the beginning. As you yourself pointed out, many aspects of the problem you are seeking to address are growing all the time, so we will be keeping a close eye on it, as I very much hope you will be too. Thank you very much indeed.