IN THE COMPETITION APPEAL TRIBUNAL Case No: 1517/11//7/22

Salisbury Square House
8 Salisbury Square
London EC4Y 8AP

Wednesday 14 February – Thursday 28 March 2024

Before:

The Honourable Sir Marcus Smith (President)
Ben Tidswell
Professor Michael Waterson

(Sitting as a Tribunal in England and Wales)

MERCHANT INTERCHANGE FEE UMBRELLA PROCEEDINGS

TRIAL 1

A P P E A R A N C E S

Kieron Beal KC, Philip Woolfe, Oliver Jackson & Antonia Fitzpatrick (instructed by Stephenson Harwood LLP and Scott+Scott UK LLP) on behalf of the Stephenson Harwood LLP and Scott+Scott UK LLP Claimants

Brian Kennelly KC, Jason Pobjoy, Isabel Buchanan & Ava Mayer (Instructed by Linklaters LLP and Milbank LLP) on behalf of Visa

Sonia Tolaney KC, Matthew Cook KC, Owain Draper & Veena Srirangam (Instructed by Jones Day) on behalf of Mastercard

Wednesday, 6 March 2024

(10.00 am)

THE PRESIDENT: Good morning, and thank you for moving to the front row; I apologise to counsel for being displaced. I think it would be appropriate if we quickly swore you all, we will do it once and we will not need to have it repeated. Do we know if you are being affirmed or otherwise, are you all affirming -- one is not --

MR FRANKEL: Affirm versus?

THE PRESIDENT: Versus being sworn, so either Bible or no Bible.

MR FRANKEL: No Bible.

THE PRESIDENT: I think everyone prefers no Bible.

MR HOLT: No Bible.

THE PRESIDENT: Would you mind affirming. Thank you very much.

DR GUNNAR NIELS (affirmed)

MR DEREK JAMES HOLT (affirmed)

MR NEIL ALISTAIR DRYDEN (affirmed)

DR ALAN SCOTT FRANKEL (affirmed)

Questions by THE TRIBUNAL

THE PRESIDENT: Thank you very much.

Welcome to the concurrent evidence, or hot-tub. Can I just make clear as I made clear yesterday that although you have been sworn and we will not be reswearing you, you are not in purdah and you should be free, if you wish to, to discuss matters with your legal team. We regard this as an exchange, not as the formal giving of evidence.

I wonder if we could hand out, I am afraid it is a very hand drawn diagram, but it is an effort that I made to depict the scheme and I think you ought to have it before we will ask any questions. Just the experts, yes, thank you. (Document distributed)

Thank you very much. Apologies for its rather rudimentary nature, I have already been criticised for the absence of decently drawn matters but I am sure we can rectify that.

I am going to ask about the scheme. I am not sure whether pass-on is going to affect the answers that you give, I strongly suspect not but before you give any answers, I would be quite grateful if you would bear in mind two scenarios: one is where there is a 90% pass-on of all costs generally and a 10% retention; and then secondly the precise converse, a 10% pass-on of all costs generally and 90% retention. I am going to assume that either which way, your answers are the same. If it makes a difference to your answers then please do say so.

The reason I ask you to look at both sides or both ends of the telescope is of course because Trial 2 later on this year will be dealing with pass-on and to the extent there are pass-on questions, I want them to be clearly identified so we do not prejudice what is going on in Trial 2. So I very much hope your answers will not be different, but if they are clearly that is something we will need to take into account.

I am going to begin by explaining how I think the scheme works. Now, this is not necessarily a question of expert evidence. There is certainly some law involved and if I am wrong about what I say on the structure, then I am sure I will be corrected in submissions in due course. So I am not going to be inviting your views on legal questions, that would be quite wrong. But if my description of the scheme is so far off being from the way you have been approaching it, then of course I will want to understand your different understanding because I will not be able to understand your opinions without having that well in mind.

So looking at the diagram, we have the scheme, as I call it, and I am indifferently referring to Visa or Mastercard there, we have the scheme at an apex of an A and then down each leg, we have what I am going to call two different markets, but we may want to discuss that.

So the left-hand side is the issuer leg and the right-hand side is the acquirer leg and what we have down each leg is a series of contracts and I have marked them in red, you can see there is a contract between the scheme and the issuer and another contract between the issuer and the cardholder and then there are three contracts down the right-hand side: scheme acquirer, acquirer merchant and merchant customer. So those are what I would call bilateral agreements between each individual on each side.

Now, what that means is that each issuer enters into a contract with the scheme on their own behalf, each cardholder enters into a contract with their issuer and each customer will have a contract for sale of goods with their merchant and each merchant will have a contract with the acquirer, the acquirer scheme. So individuated bilateral contracts. But of course they will be in a standard form and they will be interconnected because one of the things that we see here is we have a chain and the contract needs to speak to one another in order for the whole chain to work.

So what we have got in addition to a chain is something of a loop and we may want to come back to this, in that what we have at the bottom of the A is a unified person -- the cardholder, the customer -- who is the same person in any given transaction because what you have got is you have got the cardholder's customer contracting with the merchant for the supply of goods and services and the same person as cardholder paying but paying through the intermediation of this chain of bilateral contracts. So what we have is a replication in an altogether more complex way, a replication of a cash transaction. So in a cash transaction all that happens is that the customer hands over notes or coins to the merchant and receives a product in return.

Here there is actually no transfer of value by the customer to the merchant at all; instead there is an indirect transfer of value in that through this chain monies from the cardholder's account, whether it is debit or credit -- it will be an account, maybe in debt it might be in credit -- but it migrates from the cardholder up to the scheme and down to the merchant.

The key point, however, is that payment in full satisfaction is made by the customer to the merchant. That is the one thing which I see is the non-negotiable element of this entire thing. If you do not have the equivalent of cash being delivered by the scheme then you have got no scheme. What we have seen over time is the extent to which the schemes, Visa and Mastercard, have achieved a degree of universality and one of the witnesses yesterday mentioned that Visa and

Mastercard had achieved universality, which is the kind of general acceptance of the cards in transactions so that they are more or less the equivalent of cash.

So that is my take on the scheme.

One final point before I ask my first question and it is this: at each stage of the bilateral chain of contracts, there is the potential to charge money. In other words, we talk about settlement at par which means that what the customer agreed to pay the merchant is transferred without deduction through the scheme so that if the merchant is charging the customer £10, that is what the merchant receives.

Now, it is of course quite possible to have a form of settlement which is not at par where the merchant receives less. But the only way that works is by ensuring that those deductions are contractually agreed throughout the chain of agreements that I have depicted in red on this diagram; in other words, you cannot without having bilateral agreements that talk to one another have a deduction at one stage or one link in the chain which is not acknowledged as legitimate later on because otherwise what would happen is the merchant will say to the acquirer: why have I not received my £10? If the merchant has not agreed to a deduction, the merchant will be saying well, I am not going to be playing this game any more because the whole point of this is that I receive that which the customer has promised to pay by an indirect means.

So that is all I want to say by way of introduction.

I will move to my first question, which is this: is this, in your view a two-sided market and could you, to assist us, identify what you say the two markets are and what we will do is we will start with, in this case, Dr Niels and the question will then move round. But the first person asked will obviously have to give the fuller answer and then you can say how far you agree or disagree.

So, Dr Niels, that is my question to you.

DR NIELS: Thank you, sir. So a short answer is yes, this is a two-sided market and I can elaborate on why that is. Also, sir, I do not want this to become a battle of the diagrams like perhaps we had in Comparethemarket but I would also encourage maybe all of us or you to look at my figure 2.1 in my report. Maybe could we get that on the screen?

THE PRESIDENT: Yes.

DR NIELS: This figure, so I had actually a look at all the other figures that have been drawn in previous cases by the Commission, by the OFT, by previous courts in Europe and in the UK and they are all quite -- they are all similar in nature; they are similar to my picture. Maybe my picture -- my figure, I do not see it yet, but my figure is a bit more comprehensive because it has that final arrow at the bottom the relationship between the cardholder and the merchant as well, more explicitly than some of the other pictures. But my proposition would be that that is the kind of --

MR TIDSWELL: Would you like a reference for that?

DR NIELS: It is my first report.

MR TIDSWELL: {RC-H3/2/48}. I think I have that right.

DR NIELS: Indeed. So I was saying this is in essence the same picture that everyone else has drawn in the past whereas perhaps I have been a bit more explicit at the bottom between the cardholder and the merchant. In my mind, I would say that to understand interchange fee and to understand the dynamics of how these four-party card schemes operate where interchange fee comes in, this is the kind of picture you need to look at and what the others have done. Of course you can draw variations of the picture to understand specific phenomena.

So I would say, sir, your picture is actually a slight variation which can be helpful to understand certain things. I have also added a few variations myself: for example, when I talk about the CAR, central acquiring, I use this picture with another scheme next to it in another country. So it can capture other dynamics as well including the ones that you seek to capture with the -- in particular at the bottom the merchant and the cardholder.

THE PRESIDENT: You are quite right,

Dr Niels. I mean, first of all your diagram is much more elegant than mine but I will forgive you.

Secondly, I have got the contractual relationship between the cardholder customer and the merchant. It is because I have elided or rather separated out the two functions of cardholder and customer but the fact is that is the line between the merchant and the customer which is the delivery obligation on the merchant to provide the service or the good contracted for and the payment obligation of the customer.

So I entirely agree with you. What I have not put in is the payment flows, I have only marked up the contractual flows and that is why the interchange fee is in the lurid purple that you see because I do not think it has a contractual basis other than what I have delineated in red, but of course it is a payment which is what we are talking about during the course of this trial and we will be coming to that.

So that is very helpful?

DR NIELS: Yes, sir. If I can just make

two more points on this.

THE PRESIDENT: Please.

DR NIELS: One thing. You can see in my picture the dotted lines, I have called it the payment card scheme. So because all these transactions -- and perhaps you can add that to your picture easily as well, but one has to bear in mind that the transactions by card take place within the context of a whole scheme and in the scheme various activities take place as well, and that incurs costs including, as you mentioned, the payment guarantee as we have seen from the factual evidence; that is an activity that incurs cost more on the issuing side than the acquiring side.

So it is important to bear that in mind, that this is a scheme, all these activities take place in the context of a scheme and there are certain rules that are needed for that scheme.

Then to answer your question on the two sides. The two sides are the merchant side and the cardholder side. In that sense, again maybe that follows more clearly from my picture than from this picture, Mastercard and Visa as a platform are no different from other payment methods, systems that are also two-sided and have -- and want to connect consumers and merchants and need to get both of them signed up and therefore often have a skewed pricing structure.

The only difference -- the only reason why Visa and Mastercard need an interchange is purely organisationally, they do not deal with the cardholders and merchants themselves, they have issuers and acquirers. That is where interchange comes in. But in essence Visa and Mastercard are a two-sided platform connecting merchants and cardholders just -- and have therefore skewed pricing structure which is very common in two-sided platforms, just like the other payment methods have.

THE PRESIDENT: That is very helpful. In fact you have anticipated and answered a question that I was going to come to, but I will bring it out now in case the other experts disagree. You have referred to the two sides of the market as cardholder and merchant markets which to be clear I agree with, not that that matters, rather than issuer and acquirer markets and what you have done is I think you have focused on what I would call the ultimate consumer; in other words the person who is deriving ultimate benefit from the scheme in the sense that you have got as an ultimate consumer, defining that person as someone who does not on-sell the product that the scheme offers, or incorporate anything else but just uses it without on-selling. Then in that case that is the cardholder and the merchant, not the issuer and the acquirer.

What the issuer and acquirer are doing is they are taking the scheme and they are repurposing it as part of their bank accounts on the issuer side and as part of their merchant services on the acquirer side in order to provide a service to the ultimate consumer and that is, you have said, and we will see what others say, the cardholder on the left-hand side and the merchant on the right?

DR NIELS: That is correct. So the four-party schemes, you have that added complication indeed that you have the issuers and the acquirers sitting in between the scheme and the end users on both sides, absolutely correct. That is also another dynamic that gives rise to the need for interchange that we can come back to.

THE PRESIDENT: Thank you, I am very grateful for that. Mr Holt -- actually is it Mr Holt or doctor?

MR HOLT: Yes, it is Mr Holt, thank you.

Yes. So I think I broadly agree with Dr Niels' observations that essentially you can draw these diagrams in a variety of different ways and with a variety of different degrees of detail. But the essential components are that you have a scheme, you have contracts between the platform operator with on the one side acquiring banks and on the other issuing banks and that those are, as I think you have described Mr President, essentially (inaudible) demands; so in other words they are acting on behalf of their customer base.

I think everyone who has been involved in these proceedings will probably by now sort of recognise the diagrams associated with the (inaudible) full of payments when a cardholder, who is of course a customer, and that has always been implicit in all these diagrams, makes a purchase at a merchant. Obviously the purchase value is debited from the cardholder's account, the issuer effectively, and whether it is direct to the acquiring bank or via the scheme, provides that payment less an interchange fee to the acquiring bank and then the acquiring bank provides the value of the purchase less its own fee, which is called the Merchant Service Charge and that is what the merchant ultimately receives.

I think to answer your question, yes, this is a two-sided market. The schemes, obviously just focusing on these diagrams, they sort of imply the existence of a single scheme operator but as you noted there might be multiple scheme operators in existence. This obviously shows a four-party scheme operation and I think one needs to recognise the context that other payment schemes might operate in competition as well, including, as Dr Niels mentioned, the three-party models but indeed other payment methods might also be prevalent according to the type of transaction.

So as an example for e-commerce, e-wallets, digital wallets, buy now pay later and so on, are other payment methods which might be particularly attractive and increasingly used by -- by customers for those types of transactions.

I noted that Dr Niels referred to the fact that under all of these sort of diagrams you have a mechanism to transfer value from the acquiring side to the issuing side and he noted, which I agree with, that in principle a similar two-sided pricing structure transfer can and indeed does take place in many of the other payment methods, either directly applied by a three-party model or in a similar way by one of the other types of payment methods to which I referred.

So I think the answer is yes, there is a two-sided market here. I think the innovation or the additional point that I think you have tried to draw out in your diagram I think is the link between the cardholder as being the customer of the merchant and I think this might go back to the discussion that you had -- I think it was last week -- about whether this is really an A-type diagram or should it be an O-type shaped diagram because indeed the cardholder is the customer and they are engaging directly with the merchant.

I mean, that does raise an interesting perspective which is that there is a concept of neutrality of interchange fees under certain conditions whereby because of that sort of O-shaped sort of structure, if all parties had complete what you might call pass-on or surcharging, then it might be the case that there would be little effect associated with the interchange fee; in other words, in that case you would not have the rebalancing effect taking place, in that event you would neither have any concern about any competitive effects, nor might you have any benefits associated with the interchange fee.

However, the assumptions under which that would hold are not realistic, in my view, they simply do not hold. It would require individual transactions to be entirely charged on the basis of the costs of each individual transaction irrespective of the payment method, irrespective of the issuer and so on. So that is just really not what we see.

So I think that essentially is the factual matrix that one needs to take into account when thinking about whether the fact that you can sort of connect at the bottom the cardholder and the merchant to know whether that has any significant implication for the role of interchange fee.

THE PRESIDENT: That is helpful. I mean, we are very conscious that this is one unusual feature of the two-sided market, that you have got a closed system, if you like, an O, rather than two distinct customer groupings which are the general hallmark of two-sided markets. So the extent to which that makes a difference is something which we are alive to, so I am grateful for that.

Two further follow-on questions, if I may. Definitions are everything and we are using two terms quite ubiquitously: one is scheme and the other, though you have not used it so far, is ecosystem. It does seem to me that both are capable of being differently understood. Looking at Dr Niels' diagram, he is defining I think the scheme as comprising the three players -- the platform, the issuing bank and the acquiring bank -- and he has drawn his dotted line around those.

One might say -- and it may not matter, but one might say that the scheme is in fact just the Visa and the Mastercard component and what they are doing is they are providing the contractual and advisory systems to enable the issuers and the acquirers and indeed the cardholders and the merchants to participate in the scheme. But the scheme is in fact that of Visa and Mastercard which is then sold in different ways to the issuers and acquirers. It may not matter but that is a definitional question which we need to be aware of when we are using the term "scheme" because I think my definition of use is a little bit narrower than Dr Niels' is. I am not saying one is right or wrong, but we need to be aware of that.

Ecosystem it seems to me is rather a broader question, which is embracing the entirety of the players and I just wondered if you had any comments on those definitions as to what we might prefer or whether you are indifferent provided we are clear?

MR HOLT: Is that a question to Dr Niels?

THE PRESIDENT: A question for you but,

Dr Niels, do jump in.

MR HOLT: Okay, well, perhaps I will sort of briefly respond.

So I think clearly a scheme cannot operate -- a four-party scheme at least cannot operate without issuers and acquirers. So while I think it is fair to say that the scheme has certain roles, responsibilities, they determine rules, they develop technology and provide data services and have a whole range of services for which they charge scheme fees and may charge processing fees, if their scheme is used for the processing of the transaction, clearly the scheme can only function if it attracts both acquirers and issuers to operate.

So the scheme without those additional parts of the overall structure would obviously have no impact in the market.

THE PRESIDENT: I am sure that is true, but then that is true of, let us say, Facebook's social media offering in that that is only economically and legally interesting because you have on the one side advertisers who want to buy the Meta services that Facebook offers and you have enough eyeballs who are interested in participating in a social media site so that they provide their data into it that can be then sold to the advertisers. So, yes, you have got obviously interactions between the scheme vis the advertisers and the social media users, but at the end of the day the product that both are participating on is the platform, which is in that case the Facebook offering and here I will be saying is the scheme offered by Visa and Mastercard.

MR HOLT: Yes, I would agree entirely with that and obviously the scheme has an independent sort of status in its own right but I think it would be wrong to sort of treat it entirely independently in the sense that the scheme's rules and the allocation of contractual responsibilities across the two sides are the entire basis on which it is able to attract issuers and acquirers, but otherwise definitionally I think you can distinguish a reference to Visa or Mastercard alone as opposed to the broader -- call it ecosystem, where issuers and acquirers are included.

THE PRESIDENT: No, that is helpful and we will be coming to net effects the question of how far what happens on the one side affects what happens on the other side; in other words how the two markets interact in a moment but that was I think a reference to precisely that sort of connectedness which we do have to bear in mind and which we will come to, but that is one of the things you were referring to in terms of needing to understand what actuates issuers and acquirers in wanting to participate and bring their part into the ecosystem. You have nodded. I am grateful.

Another second I think follow-up point is I have quite deliberately left out of account the flow of funds. I have just marked the contractual relations. Now, we have had I think two theories of settlement or flow of funds articulated. One is where the funds do flow up to the apex of the A and then down from the cardholder account, via the issuer, into the scheme, to the acquirer and to the merchant. We have also heard that in fact it does not work that way, it may work by way of a direct transfer, issuer to acquirer, scheme not involved in terms of receiving the monies, but only involved in terms of issuing the authorisation codes for the issuer to transfer monies to the acquirer. My question to you, Mr Holt is, provided the contracts are clear, does it actually matter how the funds flow, provided it is clear what deductions need to be made and how the monies are accounted for?

MR HOLT: My view is no, it does not matter. The economic issues at stake are similar in my view whether the flow of funds goes up to the top of the A or is transmitted across, subject of course to essentially the equivalent of the actual net flows that are being made across the party.

So although there is perhaps quite a lot of complexity in the clearing and settlement process, and of course there are issues around the timeliness over which the funds are made, whether you make them gross on each and every individual transaction as opposed to batching them up and doing net transfer, you know, taking into account a multitude of transactions over a period of time, those are of course essential details that the scheme operator and the issuing and acquiring banks have to -- have to have a clear process to operate, but do not change in my view the underlying economic issues.

THE PRESIDENT: I am grateful.

Dr Niels, do you have anything to add to that point?

DR NIELS: Yes, just very briefly on that point I agree it does not matter for the current questions that we are facing in this trial and on the economics. One reason perhaps why some of this confusion in this case has come in as to how the actual clearing and settlement works is that of course there has been a regulatory push and some of this came up in the evidence yesterday, a regulatory push precisely to split schemes from processing and that is why in practice schemes are now defined separately from the actual processing infrastructure providers and therefore there are multiple options out there in the market.

But it does not matter, I agree with Mr Holt, because ultimately there are solutions for clearing and settlement.

Actually, there was an interesting description also in the Merricks judgment that came out last year -- last week of how clearing and settlement systems worked within Mastercard at that relevant time, including the time when there were bilaterals and multi-laterals. So there are various ways of doing it. It is interesting how it all works but I agree with Mr Holt, it does not really matter ultimately for the questions we face here.

THE PRESIDENT: Well, that is --

MR HOLT: Maybe very briefly, I am conscious of time, obviously there are some economic distinctions between the case where the acquiring bank might choose one processor versus another. So, for instance, even when -- I understand that even when Visa cards are used in certain countries for domestic transactions the acquirer has the right to choose a processor and it might choose, for example, the domestic scheme to carry out the processing activities. So that does in a sense have some economic relevance in the sense that that might change the competitive dimension on the processing fees. But I do not think it changes the assessment as I mentioned before relating to the incentives that the scheme is operating with respect to in relation to the interchange fee.

THE PRESIDENT: Thank you very much, Mr Holt. Mr Dryden -- is it Mr or doctor?

MR DRYDEN: Mr Dryden.

THE PRESIDENT: Mr Dryden, anything to add or subtract from that?

MR DRYDEN: Yes, let me try to quickly go through, I think there are four questions. One is: do I agree with the diagram? The short answer is yes. I think the point has been made that it omits sort of external actors so it does not include cash customers and it does not include other competing payment means.

Sir, when you were introducing the diagram, I think you suggest -- you may have suggested that all of the red lines were in a sense bilateral, I am not sure if that is true or not above the -- at the apex, whether the scheme fees are bilateral or a collective agreement as to scheme fees, but that is not really --

THE PRESIDENT: In that area, but to be clear what I mean is it is not obviously an agreement that is granular by reference to a cardholder but what I do mean is that it is specific each issuer is entering into a contract with the scheme. Likely the contract will be the same as other contracts because you need to agree standardisation but -- I am sure I will be corrected if I am wrong -- it seems to me it would be extremely strange if the issuer did not have agency over entering into the contract with the scheme such that it could say: well, I do not want to deal on these terms, I want to deal on different terms and the scheme could say yes or no depending on negotiation.

It would be extremely strange to have a connectivity between issuers, that is really what I was saying.

MR DRYDEN: Then I agree.

On the question about whether in a sense the perimeter of the scheme is narrower than the perimeter of the ecosystem, I think that makes sense. One would need to be precise in a given context about as to exactly what the perimeter of the scheme is. But I am not sure that is critical for this overall representation.

Your second question: is this a two-sided market? My answer is yes.

Your third question was to say: in that case, can you identify what the two markets are? I think actually there is more than two markets and the precedent cases have established a framework that I think is helpful. On the left-hand side there is an issuing market and that is the market in which issuers compete to supply cards to cardholders and the price there is essentially the whole bundle of prices and PQRS around the card offer.

On the right-hand side there is an acquiring market and that is the market in which acquirers compete to supply acquiring services to merchants and the price in that market is the MSC and an input cost into that market is the MIF and that is the market on which the restriction of competition is said to take place. It is slightly unusual because normally in a market where there is a restriction of competition, it is the output price of that market that is the focus but here it is the input cost into that market in the form of the MIF that is the focus which then affects the MSC.

The market definition framework has then recognised a third market which is the market in which the schemes compete at the apex in setting their MIF or their implicit MIF and I think it is best to think of a fourth market, which is the market in which merchants compete. So merchants are competing, part of their cost is the MSC and they are competing to provide goods and services to final consumers.

The fourth question is: does it matter how the funds flow? I think it is true that arithmetically any interchange fee can be replicated by a combination of scheme fees, that is sort of just basic arithmetic equivalence, you can get it back in that way. I think we have heard from some of the factual witnesses that although you can have arithmetic equivalence, the schemes have some preference to operate with an interchange fee to give effect to the transfer.

I think that answers the questions. I would only make a remark that I think the other experts went beyond, as it were, just a positive statement about the lie of the land to some sort of normative statements about MIFs being okay, that they are needed.

THE PRESIDENT: Yes, do not worry. We will be coming to that.

MR DRYDEN: Neutral, etc, I am sure indeed we will be coming to that.

THE PRESIDENT: That is helpful to have at least some statements. Just to not push back but agree with what you said about there being multiple markets, in a sense, there is another definition or problem about what is a market. This is very much a static representation of how a specific transaction might work. I have only labelled one scheme of the apex when of course we have two. I have left altogether out of account three-party schemes, Amex does not feature in here at all but of course is relevant. Similarly, I have only identified a single issuer and a single acquirer when we know that there are 30 to 50 issuers and fewer but nevertheless a respectfully large number of acquirers.

Of course there will be a market between merchants and customers and we are then into the realm of the thousands, if not tens of thousands. When we come to cardholders and relationships with issuer banks, the numbers multiply. So of course you are right, there is competition at every level and that is something which we do bear in mind. But one has to start with how the end service operates, namely payment and that is I think what this is getting at.

But the point you have made is entirely well made, but not represented here. Unless you have anything further, I will move over to Dr Frankel.

DR FRANKEL: Dr Frankel. Thank you, it is a pleasure to be here.

I would say starting at the top the apex and you asked the definitional question about "scheme" and Dr Niels had put a box around the issuers and acquirers, I take a historical view on many of these issues which informs I think how to understand them and indeed scheme originally was including the issuers and acquirers because the issuers and acquirers owned and controlled the scheme, so I find that to be of relevance.

Now, I think describing them as bilateral is a legal matter. I leave that to you to decide. But certainly it is a reasonable description the way you have laid it out and Dr Niels' diagram, I have made many of these diagrams including circles, so I think they are all useful ways of thinking about it.

Second, you mentioned in your opening question and comments your description of par transaction, you said means the merchant gets the full amount if everything is at par. I have not heard it described that way before, "par" I always think of as the transaction -- the amount that the issuer has to deliver to the acquirer is the transaction amount and then each can charge fees to their respective customers, but par just refers -- it is still par if it is just between the issuer and acquirer and I think we all understand that.

Whether it is two-sided market or not, two-sided market is used in various ways. Often it is used in a very casual way. We all recognise there is these two parties, two financial institutions are now financial institution and a processing company and they interact with two different customers who indeed interact at the point of sale. So it feels two-sided and I understand that.

But what Mr Holt was discussing about neutrality and the circle, that is an important issue and I have written about this. The technical definition that Professors Rochet and Tirole gave for a two-sided market is not just that there are two parties that interact the way the diagrams show but that it actually matters. Mr Holt explained and I think it is really identified as an important feature: as Rochet and Tirole point out, every firm, every corporation, can be thought of as a two-sided market, they hire employees, they contract with input suppliers and they contract with output suppliers, but we do not usually think of that as being two-sided. Why? Because, as they put it, if both sides are very competitive, there is not much importance to shifting fees from one side to the other.

In fact, in the credit and debit card world, the reason that I believe it is two-sided under their definition has a lot to do with the restrictions on competition. So if you think of it as a benchmark, a perfectly competitive world is a useful benchmark to an economist. What would it mean if there was perfect competition? It would be just what Mr Holt described. Any change to the MIF would affect the merchant fee but that would also affect any surcharge or discount given for various payment methods by the merchant to the cardholder and it would affect the fees or benefits given by the issuer to the cardholder and that change in MIF would just go round in a circle and completely be neutralised. Under the Rochet and Tirole definition that would be a one-sided market, even though there is parties on both sides there would not be any of these complicated two-sided effects. So I look at the way these markets evolved, including restrictions of various kinds that are subject to -- a subject of this case to have made -- they make sure that the market remains two-sided.

Let me give a contrasting payment system. We all think of cheques as obsolete and old and not of relevance but there were -- you know, a merchant would get a current account so -- and its customer would have a current account.

A customer would write a cheque give it to the merchant, they would both be dealing with their own banks and that looks like a two-sided market. I could draw it just the same as this. But we do not think of that as having important two-sided effects. Why? Because it was really competitive on the two sides and there was no scheme creating restrictions on competition, there was no MIF and it worked just fine and both parties -- the costs of both sides fell where -- lay where they fell and they both competed independently for their customers.

So I view that as a one-sided example but there is still services on the two sides. One last comment on settlement. I am conscious that it has changed in Europe and there can be different processing now and settlement might be possible. Historically, certainly in the United States, the whole idea of net settlement was that you had a clearing house function of the scheme where all of the amounts owed to and from each member of the scheme would be aggregated and netted and their settlement balances in a central location would be adjusted. So there were not any opportunities for individual issuers to decide how much to send to an individual acquirer; it was all netted at the scheme level.

THE PRESIDENT: Well, that brings us nicely on to the interchange fee. What I would like you to do is, reasonably briefly, because I do not want to overshoot my hour too much, to deal with two preliminary questions and then I will save the really hard question for last.

The two preliminary questions are these: looking at the scheme or the ecosystem, as we have described it, is it your understanding that the interchange fee is technically necessary for the scheme to work? Or, subject to the economic considerations that I am going to come to, is it optional, or to put it another way, capable of being dispensed with?

Now, that is not directly or not wholly a question of economic expertise but it does, I think, affect your expert opinion as to whether, technically speaking, the interchange fee is a necessary part for the scheme to work. Now, assuming -- and this is my second easy question -- it is not technically necessary, I wonder if you could state briefly your understanding of what the justifications for the interchange fee are.

I have identified two. The first is that it operates to discharge issuer costs or finance issuer benefits so that the -- which the acquirer ought to pay for; in other words, you have got for instance costs of fraud and the evidence has been so far that the interchange fee is to discharge some of those costs, both active to minimise fraud and preventative to eliminate it, and active to recompense those who have lost. Equally it finances things like cardholder benefits and the sense is that these are things that the acquirers ought to pay for but will not do so unless compelled. So that is one rationale.

The second is that the interchange fee is now so embedded in the market that if it were removed by a single scheme operator, there would be a flood of persons away from that particular scheme towards other schemes and so market share would be lost. That seems to me to be a variation of Andrew Popplewell's death spiral, but we can label it how we wish.

Those are the two justifications that have been articulated. If there are others, then of course I would like to hear them, that is why I am asking the question. But why do we not start, Dr Frankel, with you and we will go round in a different order.

DR FRANKEL: Sure, thank you.

First of all, for your first question, is the interchange fee technically necessary or can it be dispensed with? I believe it is not necessary. It can be dispensed with. I want to caveat this related to your follow-up question. It is important to I think keep in mind the differences between the counterfactual and going forward I always think of relief or injunction changing the market. Now, what is the sensible way to do that is a very different question I think than what is the counterfactual or what would we be doing, what would the world look like now, what would this ecosystem look like today if there had not been a MIF and I think it would have worked just fine without a MIF. I think there might be care needed to design, either through a court process or regulation or legislation, how to move away from the current system towards a par system, that may take some care to avoid sudden disruptions.

Moving on to your second question: what are the justifications? I think the best justification falls short, but it is not that it covers specific cost because if the costs fall where they lie, but everybody is in a competitive market and free to incentivise their own customers or suppliers to take into account these what look like externalities, effects on others, the market actually would work just fine. If merchants can surcharge or discount to reflect their different costs then their customers will take that into account not just what -- what their own benefits are but what the merchant's benefits are and if the issuer does not get a MIF but it has fraud costs, maybe its fees will go up to the cardholder and maybe the cardholder will use the cards less often but maybe that is efficient.

So I believe that the best argument in defence of a MIF is that if cards really are big cost saving devices, this is embedded in the merchant indifference test that may be subject to Trial 3. But the idea is if cards actually save merchants costs and for some reason merchants cannot simply discount card transactions to their own customers, the banks can helpfully come in saying: we will do it for you, we will take this MIF give it to your customer to reflect the savings that you get when they use a card.

Well, obviously from my comment, I believe that the merchant can do that themselves and do not need a MIF to do that and different merchants are going to have different costs and benefits and that goes to Mr Dryden's comment about this extra market that we should think about which is the merchant competition market.

I would let merchants compete over the terms of trade and not assume that these schemes can impose a one size fits all solution on them.

THE PRESIDENT: Thank you very much. Dr Niels, we will go round.

DR NIELS: Okay. Thanks. So I would say the MIF is or interchange is perhaps not technically necessary but I see it as economically and commercially necessary or certainly very rational, a very rational thing to do. The justification for that I go back to the two-sidedness. Two-sided -- these are two-sided platforms, I agree with Professor Frankel that at times the term is used very loosely, but to me, and I think in economic theory, two-sidedness, the definition of that is a demand side -- is purely driven by a demand side phenomenon, it is the net -- the positive network externalities between the two sides. If there are two sides and demand by one side depends on the demand by the other side positively, then you get a two-sided platform.

So in this case cardholders and merchants we know we have seen this before, the demand for cardholders is positively reinforced by the demand for merchants, by merchants and the demand by merchants, merchant acceptance is driven by the amount of cardholders.

So that is a justification, or that is the first step in my justification. So all payment methods, as I said before, payment systems generally including Amex, Klarna, PayPal and Visa and Mastercard are two-sided platforms and they -- and to grow this scheme to be successful competitively, they have a skewed pricing structure. They want to achieve a skewed pricing structure precisely to get both sides on board and one side has a greater willingness to pay relatively to others. In payment markets we see it is typically the consumers who pay less and the merchants who pay more.

So Amex, Klarna and PayPal have that structure. Visa and Mastercard also want to achieve that structure but because of their organisational structure of their scheme or ecosystem, they need an interchange fee to achieve that because the costs that are incurred when -- when performing the functions of the scheme, they fall relatively more on the issuer side, so you get an imbalance. So the justification for the interchange fee is in my mind, and I think it has always been traditionally, that it is a balancing mechanism to get both -- to get the two -- to keep the two sides, so the issuing banks and the acquiring banks, in balance and to achieve that skewed pricing structure. So that is actually the -- yes, that is linked to the first justification that, Mr President, you gave.

But you also have the competitive --

THE PRESIDENT: Could I just ask a couple of questions about that before you go on to the second one?

DR NIELS: Sure.

THE PRESIDENT: So you have mentioned the interchange fee as a balancing transaction. It is a compulsory one, is it not? It is one that is imposed on acquirers to the benefit of issuers and it is one where as matters stand neither the issuer nor the acquirer as groups have agency in that the issuers might very well want more but they have got to persuade the scheme to get more and the issuers -- the acquirers might very well want to pay less but they have then got to persuade the scheme that the interchange fee should be varied, but it is the interchange that is set by the scheme under the present system and it is to that extent a compulsory incident of the bilateral contracts that we have been discussing that form the two legs of the A.

DR NIELS: I think -- I think that is

correct. That is a correct description. It is -- if it is indeed the scheme that sets the fee, then the acquirers and issuers at that point it becomes compulsory, I think that is a factually correct description.

The degree of agency that the issuers and acquirers have I think that has varied over time, I cannot really comment on that.

THE PRESIDENT: No, that is helpful.

Next follow-up. One of the reasons two-sided markets are interesting is because one gets pricing oddities. So take the free newspaper. You get a situation where on one side you get something very odd that is going on; you get the reader of the newspaper getting something that they value for nothing and the reason that that happens and you get that pricing oddity, price well below cost in that market, is because the readers incidentally cast their eye over the advertisements that are plastered all over the pages of the newspaper and advertisers are prepared to pay the publisher of the newspaper enough to cover their costs and make a profit and it seems a good idea to widen the readership making the advertising market more profitable by giving the newspaper for nothing to the reader.

So one gets these pricing oddities and that in most markets is a feature of market forces. My question -- I have really jumped to the third hard question that I foreshadowed but I will ask it now -- is: does the interchange fee constitute a distortion of market forces that would otherwise arise by negotiations between issuer and scheme and scheme and acquirer over the apex of the A, which is short-circuited by and distorted by the interchange fee cutting across the two markets as we have understood them?

DR NIELS: Yes, so I think it is -- so you could call it a pricing oddity, the skewed pricing structures as I refer them, but they are actually very common in two-sided platforms, whether actually competitive or monopoly platforms -- the free newspaper is an example -- and once you get in that situation where sort of an equilibrium, where market forces lead you to that it also means you know one side gets it for free and we have that in payment systems in the UK, we have that in banking, a lot has been said already about free banking once consumers get used to that, it is very hard for market forces to get -- to overcome that and therefore that is the equilibrium you are in and that is what we see also in payment systems in the UK.

So your question is it a distortion of market forces, I would say no, it is quite the opposite, it is a mechanism for these platforms in competition with other platforms to be able to achieve that optimal pricing structure for them so that Mastercard and Visa, that way they can compete with other payment methods where which are also in essence for free to consumers.

So that brings me actually to the final quick point I wanted to make about justifications, which is indeed partly also the competitive pressure.

So I would not call it a death spiral because that was in the context of Visa and Mastercard directly with each other. But for sure one of the key justifications for interchange is the competitive pressures that these schemes face. So the MIF itself is a competitive tool for the schemes to attract issuers into the scheme, the ecosystem in the first place, and for issuers, the MIF revenue is a key competitive mechanism to make their product attractive to cardholders.

THE PRESIDENT: Thank you. One other follow-up and we will then move on to Mr Holt. Given that you are in agreement that the interchange fee is not technically necessary but is economically justifiable, why is not the appropriate counterfactual simply to put a line through the interchange fee and ask what will happen; in other words, why does one need a more complex counterfactual than that?

DR NIELS: Well, I would say precisely the counterfactual analysis should be to draw a line through multi-lateral interchange fees because those are the ones being challenged here, they are the factual ones and see what would happen and I would say, well, then you get to bilateral negotiations on the interchange fee because you cannot -- I do not think you can cross out interchange altogether even if you leave it to market forces because the scheme would not be in balance. Issuers and acquirers would need to negotiate. But I am conscious the question on bilaterals and their feasibility is a separate question but I am happy also to go into that later.

THE PRESIDENT: No, I understand what you are saying. What you are saying is that if one puts a line through multi-lateral interchange fees you ask yourself what would happen in the market without any further central imposition of a replacement rule, you ask yourself what would happen in terms of the evolution of the market without this -- if I can call it -- offending provision and you just ask yourself what would happen.

DR NIELS: Yes, that is how I would approach it.

THE PRESIDENT: No, that is very helpful. Mr Holt?

MR HOLT: Okay. Yes, thank you, sir.

So on the first question I do not think it is actually particularly contentious. I have not suggested and I would not suggest that it is technically necessary to impose an interchange fee but I would agree with Dr Niels that it is due to the competitive and commercial realities of operating in a two-sided market that it may be essential and in some contexts -- it may be in other contexts it may not be essential.

Moving on to the question of what is the rationale for it, or are there any justifications for it -- I think there are several -- before saying what those are, I think it is worth just emphasising the point that Dr Frankel made around what is the definition of a two-sided market, Dr Niels then expanded on that.

I think the critical point is not just that there are the two sides and that there are network externalities between them but also that price structure matters, in other words the -- the success of the product or the scheme will be dependent upon a different price structure i.e. you need to optimise on the price structure, not just the total aggregate price level across the two sides and in general, and that is consistent with the literature Rochet and Tirole, that is an important component of a two-sided market.

So then moving on to the justification

type points. Some of these have been identified by Dr Niels but essentially the cost revenue balance, so in other words the fact that under the scheme's rules of operation and the contractual obligations it may be that issuers bear certain responsibilities, it could be fraud, it could be other aspects, which lead to them incurring costs, so the costs side of that, but again it is also the revenue versus cost balance which together needs to be taken into account. That inevitably leads one to need to look into relative price sensitivity across the two sides.

I appreciate there is a very specific question about that so I am happy to comment on that now or we can return to that later, but I think --

THE PRESIDENT: No comment on it now --

MR HOLT: So I think it is quite clear that price sensitivity is greater on the cardholder's side than it is on the acquiring side or the merchant side. That is obviously consistent with reality; in other words that is the pricing model that payment schemes tend to adopt, not just card payment schemes but other pricing methods, they tend to adopt a merchant pays model as opposed to a consumer or user pays model. I think the main obvious economic rationale for observing that in the market is that sensitivity of pricing on the cardholder's side is greater, that is also backed up by a wide range of academic articles I think some of which were disclosed by the Mastercard side in the last couple of days. For example, studies by the ECB would have looked into cardholder reactions to fees, obviously Dr Niels provided some evidence from a survey that Oxera carried out. But irrespective of the precise empirical evidence I think the most obvious answer to that is that that is what is happening in the market because it obviously makes sense to adopt a price structure that recognises the differential in price sensitivity.

So that is one of the rationales, I think, for the MIF, there are a number of others.

I think before we move on to the competitive factors, there is also the sort of intrinsic incentives of the different sort of stakeholders within the scheme that needs to be taken into account before you even get to these kind of factors. Just take, for example, the fact of the risk of fraud which obviously is a significant cost in relation to schemes and which under the current framework is largely allocated in terms of responsibility to issuers. Now, when a cardholder is presenting cards or even in a card not present framework for e-commerce, if that transaction goes ahead there is obviously a risk that it might be fraudulent and issuers therefore have a trade-off to consider: do they accept or authorise the transaction or do they decline it?

Increased amount of fraud might lead to a general incentive to increase the decline rate and obviously you also have incentives across all of the parties to try and mitigate and manage fraud levels.

But given that it is a problem that does exist, issuers have a trade-off to take into account as to the authorisation rate.

Now, the cost to them of fraud will tend to be increasing with respect to the transaction value overall. So the more transactions they authorise, the more exposed they are to fraud. So that transaction-related cost is something that can be offset or contributed to by a transaction-related interchange fee and that is something that I think the witnesses Mr Knupp and Mr Steel have identified.

THE PRESIDENT: Pausing there. Actually (inaudible) the question of whether the interchange fees in fact are distorting the competition rather than consistent with it.

Let us take a hypothetical example to do with fraud where one has got a very proactive acquirer, who, in conjunction with the merchants that they contract with, has at some expense put in place a series of mechanisms, it does not matter what they are, that eliminate or massively reduce fraudulent transactions, there is just some way which their systems operation just reduce fraud.

Now, as matters stand, the acquirer cannot go to the scheme and say: look, I have done sterling work here, I am a trendsetter in fraud minimisation, I appreciate it is normally done on the issuer side but actually I am saving all of the issuers a lot of money because I have been very proactive. Why should I pay for other people's less competent reactions to fraud? Why can I not negotiate a rate directly with the scheme and simply avoid this rather broadbrush payment per transaction over to issuers who are not doing what I am doing?

MR HOLT: So I think in fact, a mechanism for differentiating between the approaches that acquirers might adopt in relation to different transactions does exist; in other words there are different interchange fee rates that might apply depending on the relative security of the -- of the card reader device or the use of particularly enhanced security that the acquirer might well be operating.

THE PRESIDENT: They are acquirer specific, have I got that wrong?

MR HOLT: No, those can be -- well, they are transaction type specific. So in other words there might be a higher interchange fee for an older or less fraud resistant type of transaction, sort of a less modern card reader, for example, or one that is not using three-factor verification, things of that nature. So where the acquirer is specifically adopting technology of that type obviously the information as to that type of transaction is transmitted and therefore effectively a lower interchange fee can apply.

So variation in interchange fees can be used to incentivise different parties, to adopt strategies or behaviours that are consistent with the overall success of the scheme, so that is one of the potential things that you can do in terms of variation across different types of transaction or different types of security.

THE PRESIDENT: Take interregional MIFs, which are far higher than intra-regional MIFs and one of the reasons is fraud. In that situation, if my hypothetical acquirer has found a way of eliminating, to put it very highly, fraud in these intra-regional transactions, acquirers will still pay a higher rate?

MR HOLT: Yes, my understanding is the main mechanism that acquirers would have that would have an impact on fraud rates would be the selection of the technology or the type of transactions processing that they carry out.

So there are quite complicated schemes of MIFs that might apply in different sort of conditions. So in other words an acquirer could achieve some sort of a discount by adopting a particular type of transaction technology which would have a lower impact on fraud.

I think -- the recognition I think as to how fraud occurs is that it is not solely or even predominantly something that acquirers can directly control. They have that element that I just described in terms of the technology used for the processing of the transaction but other than that, there are a range of other factors over which they do not have control and which obviously does need to be allocated to one party or another in the system.

Under the current conditions, that risk is broadly allocated to the issuer. So obviously that means that issuers have incentives to try and manage the level of fraud but then therein lies a trade-off: the more you do to limit use of the system or to impose frictions to try and lessen the risk of fraud, then there are obviously concerns as to the cardholder convenience factor and whether the cardholder is actually going to want to use cards that are declined on an increasingly frequent basis.

THE PRESIDENT: Mr Holt, if I can just feed back what I am getting from you because I would like you to correct me if I am reading back what I think you have said wrongly.

I think what you are saying is that there is a far greater acquirer subjectivity to the interchange fee that is paid in that the acquirer can cause that fee to vary depending upon, for instance, investment decisions in terms of equipment.

MR HOLT: Well, that is true in relation to investment in equipment that might lead to different levels of security and for which a different interchange fee might apply. Yes.

THE PRESIDENT: I see, yes, yes Dr Niels.

DR NIELS: Just to add a very quick point. I think we experts, we are not the technical experts on fraud etc, but my understanding is one very important reason why more of these costs fall on the issuing side and more even of the possibility is precisely because the scheme offers this guaranteed immediate payment, the payment guarantee aspect of the scheme.

So the merchant in your diagram, we discussed it earlier, gets the payment immediately. Now that means that thereafter who then bears the burden of detecting whether was this a fraudulent card or etc, that comes after the event. In an alternative system you could say: well, okay the merchant does not get their money immediately, it takes 45 days and in the meantime we investigate whether this is a fraudulent transaction or not.

THE PRESIDENT: Sure, but what I was postulating was ex ante anti-fraud device pioneered by a single acquirer and what I was exploring was the extent to which that efficiency and that effort would not be recognised in the overall pricing structure because the interchange fee is broadbrush and essentially transaction based not differentiating between one acquirer and another and really what I was articulating was a question of whether having this broadbrush payment cutting between the two lines instead of having the negotiations going across the apex on each side is in fact a distortion rather than an encouragement for more efficient outcomes that would pertain if you did not have the interchange fee as it is.

DR NIELS: I understand what you are saying and again I would not call it a distortion and I think also what I understand from the factual witnesses is that if ex ante in your hypothetical on the acquiring side they did discover some really effective mechanism to detect fraud then over time a scheme would look for a new equilibrium in the balancing because it would realise through cost studies etc that actually a lot of the fraud costs are now efficiently done on the acquiring side and that would over time be very much reflected in interchange. As Mr Holt said, it is my understanding as well of how the schemes work, they do have very much the incentive properties of the interchange fee in mind when incentivising issuers to undertake certain anti-fraud measures etc but that can be flexed over time if suddenly on the acquiring side there were an effective mechanism.

MR HOLT: Yes. I think I would agree that one of the questions that you asked, sir, was:

is there variation in interchange fees and you also asked: is there a variation both by particular characteristics of transactions and security types, on which I have commented: but might there be variation over time? The answer to that is very much yes, there can be variation over time if the revenue cost balancing principles as well as the competitive dynamics evolve over time.

So this hypothetical scenario whereby in a counterfactual where some new invention of technology meant that acquirers could invest and really sort of dramatically affect fraud, that would be exactly the sort of revenue cost balance factor that a scheme would optimise into the scheme to try and take advantage of that reduction in fraud, which obviously is a cost to everyone in the system.

I am wary -- this is sort of a fairly lengthy answer in terms of what are the rationales for the interchange fee I have given, essentially what are some of the intrinsic ones, i.e. just thinking about the participants on a scheme that -- without taking into account competition, Dr Niels referred to some of those. I think there are three that are crucial to take into account, all of which are relevant from the scheme's perspective of optimising. One is the four-party competition, so that is that obviously the interchange fee is a mechanism of competition in terms of attracting issuers to the scheme, it is one amongst several factors that issuers will take into account, I would expect, both acceptance network, value added services and things of that nature will be important but the interchange fee is obviously important because that, there is no particular incentive for an issuer to adopt a scheme that is offering less revenue as opposed to more revenue, it is just a basic commercial proposition. But one then expands beyond the four-party proposition to thinking about competition across other card networks. Again we have already referred to the three-party model which adopts a broadly similar two pricing market structure with a broadly merchant pays model with transfers. So in my view it would cause a distortion to -- to essentially intervene to prevent that very same type of two-sided pricing structure to emerge in a four-party model compared with that happening in the market with a three-party model.

What you then have is the particular selection of the business operation model, i.e. four-party versus three-party, wholly determining success in the market. Perhaps wholly is, you know, a normative point but having a significant impact at least on how competition is working in that market. But then as I mentioned before, there are other payment methods which also adopt a merchant-based model and which are able to offer consumer benefits. Klarna, for instance, offers a convenience of spreading purchases out over time but also on a zero interest basis which is obviously a benefit to the consumer and of course that is done because the merchant pays for it and the merchant does so willingly because that is something that in competition with other merchants can lead to increased sales. So I think those competition factors are important.

You asked a number of other questions around: is the interchange fee a distortion by reference to a number of possible counterfactuals? I could spend unfortunately quite a lot of time talking about the comparison of the interchange fee to any of the other counterfactuals that are being discussed here. Very, very briefly, if you have a default interchange fee, you can also of course have bilateral negotiations, but in my view you are very unlikely to get any deviation from the default because the issuers would have no incentive to offer more and the -- sorry, the acquirers would have no incentive to offer more than the default and issuers would have no incentive to offer less. The reason for that is free-riding, I will not perhaps go into that at the moment.

If you do not have a default and you remove the default interchange fee and there is no other default, then I think we are in the world which is the Sainsbury's capped bilaterals counterfactual proposition, which I think all the experts in that case agreed that that would be likely untenable or problematic from the scheme perspective because of the hold-up problem.

That of course then leads us to a situation where if you do not have a default multi-lateral interchange fee but you are in the IFR context so there are nonetheless regulatory caps that do apply, then that resolves the hold-up problem, so I think bilateral counterfactuals could operate and effectively would lead to the same outcome as you would have with defining a positive MIF at regulatory caps.

Then finally I think it is a different sort of model, but one which broadly would lead to a similar outcome, which I think is what might be described as your scheme fee negotiation world where rather than a rule defining what the interchange fee is, that would be commonly applied to all participants, issuers and acquirers, the scheme would then negotiate individually with acquirers and also with issuers just to identify what it is that they (a) can offer from the acquiring side, or (b) need from the issuing side.

Again one could spend quite a bit of time on that and I am conscious that I am taking up quite a lot of time but my overall view on that is you would broadly lead to the same outcome as you have with the MIF it would lead a very similar level of overall cost revenue rebalancing.

On the acquirer side, all the incentives and competitive dynamics would effectively be exactly the same because each acquirer would still be acting on behalf of the merchants that it wants to supply acquiring services to and they want to accept payment cards in order to compete with their rivals. So there would be no real variation and I think that applies even when comparing large versus small acquirers; in other words, whether you are large or small as an acquirer you still need to offer the sorts of payment services that your merchants are going to want.

It might be a bit different on the issuing side where size potentially could have more of an impact on the bargaining position and then there would be a number of consequences which I am aware that I think Mr Knupp had identified when talking about this counterfactual last week, which is that you might remove the neutrality aspect of interchange fees which are commonly applied across issuers, and potentially lead to, you know, large issuers have stronger market positions because they are able to negotiate higher interchange fees.

I will perhaps pause there.

THE PRESIDENT: Mr Dryden?

MR DRYDEN: Thank you. The first question was whether the -- if it is technically necessary for the operation of the scheme. It is my understanding that it is not necessary.

You then asked about justifications for the interchange fee and I think to understand this, it is helpful to take a step back and understand what drives the setting of the interchange fee, so we understand its factual level before we consider how that can be justified.

My understanding of how the market works is that Visa and Mastercard are two schemes that seek to have essentially universality -- near universality of acceptance, as has been referred to. They therefore will push the interchange fees up as high as they can on the -- sorry, let me take a step back.

Their objective is universality. There

are then some important conditions of how competition works on the merchant side of the market and that is -- there are two key factors. One is that the merchants do not surcharge so they cannot send a signal to the customers of the merchant about how expensive the payment means is to the merchant, so no surcharging. The other is that it is very costly for the merchant to turn down a Visa or a Mastercard because they run the risk of losing the entire transaction to another merchant who does accept it, that is the business dealing effect.

These two things in combination create the merchant predicament and that is they are not able to send a signal to the customer about how expensive the payment means is and they are not able to afford to turn it down because of the risk of losing the transaction. This is a market that is not functioning well because it is a market that should have a price and there is no price, no surcharge.

This was the insight the business dealing was the insight of Rochet and Tirole and that was the evolution from Baxter.

The effect of this set of circumstances is that the schemes who are in competition with each other are going to push the MIFs as high as they can, consistent with the merchant still accepting them so they still have uniform acceptance and they do not want to stop anywhere short of that because the MIFs help them compete with each other on the issuing side maximising the size of the scheme.

So this is the dynamic of competition, it is a strange dynamic of competition because the more intense scheme competition is, there is an upward pressure on the price they were worried about, not a downward pressure. There is, by the way, a completely different world which is a world of surcharging and then we would see the schemes competing with each other to push MIFs down because they want to have small surcharges which and then on the issuing side cardholders would take out the cards that attract small surcharges when they use them in the shops and that creates downward pricing pressure on MIFs. That is the exact opposite of what we have, so we have the upward pricing pressure on the MIFs.

That is the factual situation. What as economists -- and what it implies is that there is a clear malfunctioning of competition on the acquiring side. There is a distortion of competition.

What economists have then done is think about the -- how do you justify an IF or a MIF in those circumstances and the answer is that the IF should essentially cure an externality so it should be providing the right level of subsidy to the issuing side to encourage the right amount of card usage. So if cash is more expensive than cards, and if merchants are also not surcharging for the use of cash, the justification for the IF is you subsidise the issuing side to the right amount to promote card usage to the benefits of merchants in a way that the merchants cannot themselves do because they cannot discriminate between the payment means. So as with any kind of subsidy in economics the justification is that it is curing a market failure and it has to be to the right extent.

That is the competition problem and that is the economic way of thinking about the justification of the interchange fee.

Then coming very quickly to the justifications, sir, that you suggested, the first one is that the IF should be somehow commensurate with discharging issuer costs or some proportion of them. In my submission that is not an economic way of thinking about the problem because it is not dealing with this externality. It is in fact a problem that it is in fact a way of thinking that is fundamentally undermined by a kind of by endogeneity problem, which is the amount of the issuer costs is itself a function of how high the MIF is. So in other words, the MIF is flowing across to the issuing side and then the issuer's costs reflect the fact that they are competing away to a large extent the MIF in the services that they provide.

So one way of looking at that is if I double the MIF from today's levels, issuers would then have more costs because they would be competing amongst each other with that extra MIF subsidy and they would be providing more interest free credit, more reward points and etc, more frills. There might even be more issuers entering the market seeking to obtain some of this MIF for themselves.

So if we double the MIFs then we come along in a few years, the doubled MIF will look like it is necessary for the discharging of the issuer costs but the issuer costs are always going to be linked to the level of the MIF. The level of the MIF, going back to what I said earlier, depends on the merchant predicament of not being able to surcharge for cards and having to accept cards otherwise they lose business.

Then that flows to the other side and it explains why the issuer costs are what they are and there is not an economic --

MR TIDSWELL: Sorry, I did not mean to interrupt you.

MR DRYDEN: So from an economist point of view we do not look at these issuer costs as if they are sacrosanct and think they have to be funded. In fact, they may be excessive issuer costs and that is part of the inefficiency, because they are being funded out of the exploitation of the merchant predicament on the other side of the market.

So anchoring the analysis in thinking about one must find a way of discharging the issuer costs I do not think is the right way of thinking about things.

MR TIDSWELL: Could I interrupt you.

When you talk about the externalities that might justify a subsidy, what do you mean by that, are you talking about a particular category of costs that might justify a subsidy or are you talking about something else?

MR DRYDEN: The most classic idea which is a variant of the merchant indifference test, I think it is wrong to equalise it is the externality of whereby the customer and the shop uses cash rather than card in a world which has to be proven that cash is more expensive than card and yet the merchant is not signalling via surcharge to the customer that cash is more expensive than card. So then the -- the customer in the shop is imposing -- if they choose cash is imposing a negative externality on the merchant, they are imposing a cost on the merchant without taking account of the fact that it imposes a cost on the merchant.

Then the idea is that you somehow calibrate the level of the MIF to correct that externality, so you -- in the simplest version which generally would not prevail, but in the simplest version you equalise the level of the MIF to the extra cost to the merchant of handling cash and that will be dissipated in all sorts of ways on the issuing side in terms of lower prices or more reward points. In some sense it does not really matter, it will encourage card users to precisely the right extent so that more people use cards in the shops and you get an efficient outcome.

MR TIDSWELL: Yes. So you are saying that it is actually the inefficiencies which the merchant is faced with and the way in which the card creates an efficiency that when used justifies the --

MR DRYDEN: Yes.

MR TIDSWELL: Yes, I see.

THE PRESIDENT: Does this not also potentially operate in another way, if one cannot differentiate between the price of (inaudible) in response to different forms of payment, then what the merchant will do is they will raise their prices generally so that in effect cash payers will be subsidising the payers by cards who are treated the same in terms of price but who are actually getting a slightly better deal because of the costs of the cash in a card scheme which are not reflecting the price.

MR DRYDEN: Yes, that depends obviously on -- which is another issue, but that depends on whether there is pass-through, whether the merchant just absorbs the higher MSCs or whether it passes them through into final prices if there is pass-through into final prices, cash buyers will be worse off with no compensation in their other pocket, as it were. It is also true the card buyers may be worse off because actually the card buyer would rather have lower prices in the shops in that scenario and fewer reward points on the issuer side.

So in a sense the merchant predicament is exploited with high MIFs that overexpand the issuing side of the market from a socially optimal point of view.

THE PRESIDENT: I think the answer you

have just given answers the question which we will finish on, which is the distortion of the interchange fee. I think you would say it does distort because all of these costs and market questions on one side, in other words what does the acquirer charge the merchant, what does the merchant charge the customer and what does the acquirer say to the scheme, all of these things will be different if one got rid of the interchange fee and said: well, it may be that you pay exactly the same, but you should negotiate that amount on an individual bilateral basis with the scheme rather than have it imposed upon you as an adjustment across the two markets.

MR DRYDEN: Yes, I am not going -- I mean, there are two elements I think to what you have just said. One is the level of the interchange fee and the other is the means by which it is determined. At this stage, I am only suggesting that the level of the interchange fee in the factual is liable to be too inefficiently high and one has to go off in my mind to 101(3) and figure out what is the efficient level.

I am not making a suggestion there about an alternative mechanism such as bilaterals by which that can be achieved.

THE PRESIDENT: No, forgive me, I was suggesting not so much an alternative mechanism as the use of the existing mechanism in that one says: instead of having an interchange fee imposed, you simply negotiate bilaterally, but bilaterally acquirer with scheme and scheme with issuer.

MR DRYDEN: Yes.

THE PRESIDENT: Rather than bilaterally between acquirer and issuer. That was the underlying premise of my -- the distortion point I was putting to you.

MR DRYDEN: Yes, I am not sure I quite see the point. But I mean, it is not clear to me that that takes away the -- I mean the -- if the scheme is interested in maximising scheme profits or maximising scheme output I think there is still going to be a tendency for the interchange fee to be too high because it exploits the merchant predicament. Maybe I am missing the point.

THE PRESIDENT: No, I am postulating no

direct payment to the issuer by the acquirer at all. So what I am postulating is no interchange fee, and when I say if that were the case, one would then say, the scheme would say, look, because of the way the two markets operate we do need a flow of monies from the acquiring side to the issuing side. Here is why, and it goes down to individual negotiation as to whether the scheme can persuade each individual acquirer to pay more such that the issuers pay less. In other words, one translates the imposed rate that is the cut through between the two markets, one replaces that by a part of the negotiation that arises between the scheme and the acquirer in each contractual situation that arises, where each acquirer negotiates separately with the scheme, as does each issuer, and you deal with the costs of the scheme including (inaudible) fraud in that way.

MR DRYDEN: I find it -- I struggle a little bit to see how that would play out. I mean, I am sorry to repeat.

THE PRESIDENT: Not at all.

MR DRYDEN: Sorry to repeat myself, but

I think the only point that I am trying to make is that -- is that the, is that there is a market failure on the acquiring side because, because of the lack of surcharging, as I have mentioned, and the fact that the merchant cannot really afford to turn down the card.

So any arrangement that exploits that position of the merchant is liable to produce an interchange fee above the efficient level because it is moving too much across to the issuing side. It is moving a pot across that is derived from exploiting market power, not because it is -- you know, not because it is tied to providing something that is efficient on the issuing side.

THE PRESIDENT: I am very grateful. We have got on far too long. Mr Frankel, you started us off, but I think the one question that evolved after you had had your say was the question of whether the interchange fee produced a sort of distortion.

DR FRANKEL: Yes.

THE PRESIDENT: I think you are entitled to have the last word.

DR FRANKEL: I am happy to respond to some of this, your follow-up questions after the break if you want to do that.

THE PRESIDENT: No. I think we will finish this section now, so do give your answer and then we will rise.

DR FRANKEL: So let me kind of go in reverse order.

The question you just asked Mr Dryden about separate payments to and from the scheme at the apex, that is what has been referred to in the IFR and in other regulations around the word as circumvention. If the scheme says we are not going to have the issuer be paid by the acquirer, do not just pay us more scheme fees and then we are going to supply funds to the issuer, that could just replicate the interchange fee. If I understand Mr Dryden correctly, he thinks that would just preserve the problem that we have now, and I would agree with that.

As to whether there is a distortion of competition from the interchange fee, I think I also totally agree with him about what we call the endogeneity of costs. So it is not there is a fixed amount of fraud or a fixed amount of costs that issuers have that have to be funded. Those costs reflect the MIF that they receive, and we also hear about how all this revenue goes to the acquirers. Well, it goes to the acquirers in that quantity because of the MIF that they must pay, so they charge the merchants.

The distortion can be illustrated with an anecdote. I will use the United States anecdote, I think there is also a good European anecdote, but in the United States we have two kinds of debit transactions that we still do. One is authorised with a pin and others are authorised -- these are both at the point of sale -- others are authorised with a signature, okay. But the MIF, until regulation equalised them, the MIF was much higher on the signature authenticated, if you want to call it that. It was really just software algorithms that tried to prevent fraud, but they did not have a pin. A pin was known to be a much more secure transaction. Europeans all adopted pins with chip cards long before Americans adopted even chip cards, and we still do not have pins on credit card transactions, for example.

Well, what happened? The issuers worked hard to get their cardholders to use signature debit transactions because they earned much greater MIF revenue on it. Merchants were powerless for a long time. Then they were able to develop what they called pin prompting. So at the point of sale on the electronic pad a pin would appear and that would induce many customers to enter their pins. But often that was not the case and it is still not the case, and so fraud ends up higher because of the MIFs.

One other European anecdote that has been mentioned here is the decline rate. Well, you could say if the MIF goes down, the decline rate goes up, that sounds terrible. But if you run that in reverse you say, well, we raise the MIF, what happens? We reduce the decline rate, we reduce the sensitivity of our fraud detector. You are going to get more fraud because there's greater MIFs. I think that is the logical implication of that anecdote.

You had asked about whether cardholders or merchants are more sensitive; this came up.

I could go into that at some length but maybe I will defer that to later.

One question on definitions that I would really like to hear is what is the definition of balance, because we all want to be balanced, no one wants to be imbalanced. But I really do not know what balanced means in this context.

THE PRESIDENT: Thank you very much, Dr Frankel.

What we will do is we will rise for 10 minutes and then Professor Waterson will ask his questions.

Thank you very much.

(11.50 am)

(A short break)

(12.03 pm)

PROFESSOR WATERSON: So I am going to ask some questions now and, if possible, make your answers relatively brief. We have gone on for quite a long time.

The first one is a brief follow-up from some points that the President made. In your view, are organisations like Airbnb and Booking.com, are they two-sided markets, or are they in two-sided markets? I will go from

Dr Niels onwards.

DR NIELS: So my answer is yes, clearly they are, again because they have customers on two sides and there's positive externalities between the two sides. Airbnb needs more advertisers with rooms on the platform and to attract more users, and the more users it attracts the more advertisers it attracts.

The pricing structure is also skewed. It will charge commissions to one side, to the advertisers rather than the users, and also I would actually say this sort of -- the analogy that was between an O and just two sides, I would say in that sense they are like payment systems because there is -- at the end of it, the platform brings them together and at the end there is a transaction between the advertiser and the user because, well, there is a monetary transaction and there is a use of the actual room and, therefore, there is not such a big difference between Airbnb booking on one hand and these payment schemes on the other.

MR HOLT: I would agree with that. I would also perhaps mention that these are also examples of two-sided markets where the operator operates in a competitive environment, and therefore the pricing structuring that they adopt can have important ramifications for their success.

So if, for example, Booking.com was competing against a number of others, like Hotels.com, and adopted a differential pricing structure to that which is competitive in the market and reflecting relative sensitivities of demand, then I think it would suffer commercially in doing so.

MR DRYDEN: Yes, I think they are also two-sided platforms.

I think one thing we need to avoid is the suggestion that -- I am not sure if it is made -- that by dint of being a two-sided market or a two-sided platform it cannot have a problem. I mean, one-sided markets, one-sided markets are a mixture of markets that work well and have competition problems, and two-sided markets are markets that work well and some have a competition problem.

So it is necessary -- beyond making the analogy, I think it is necessary on the specifics of the market we have, to look at its particular features, which is what I did. I identified what I think are particularly salient features in my previous answer.

PROFESSOR WATERSON: Dr Frankel.

DR FRANKEL: I would say I have not studied these businesses, and so clearly by the casual definition of a two-sided market they appear to be two-sided markets, but so is a fish market and so is a supermarket bringing together people who eat and people who supply food and they -- they are positive externalities. The more people who eat sushi, the more likely when you go to the supermarket you are going to find sushi.

So I would not draw any other conclusions from the mere fact that they have two sides.

PROFESSOR WATERSON: Are there any differences -- maybe it would be better to ask Mr Dryden. Are there any differences from the Visa or Mastercard schemes that you would identify?

MR DRYDEN: Well, I think the key difference is the one that I identified before the break, which is that there is a particular market failure on the acquiring side, and that is that the -- is that the merchant is unable to send a price signal to the customer about the relative costs of different payment means, for practical purposes.

The consequence of that is that the customer in the shop exercises their choice of payment means without regard to the costs that that imposes on the merchant. That is the negative externality they impose. So if MIFs are very high and MSCs are very high, the customer in the shop who chooses to pay by card is not taking account of that cost imposed on the merchant and the merchant is unable to send a signal to them to direct them appropriately.

In addition, the merchant, unless the MSCs become extremely high, is not going to turn down that means of payment, because the risk is that they will lose a fraction of the transactions and they would lose the entire surplus or gross margin that they would have made from that transaction to another merchant who does pay.

So it is a particular set of features that mean that competition among schemes will push the MIF up to this sort of maximum willingness to pay of the merchant and create this transfer across to the other side. That is the heart of the competition problem.

PROFESSOR WATERSON: Thank you.

MR HOLT: Can I just sort of make one brief point which relates to the externality which Mr Dryden has identified.

So I think he is right in identifying that the Rochet and Tirole merchant indifference test framework goes into what is the externality on merchants, from accepting different types of payment methods and whether there are potential cost savings that they are not able to access easily themselves because of the pricing policy but which could be made via an interchange fee.

A couple of brief points on that. One, although that literature is generally framed in the context of card versus cash, in general in my view a broader set of potential alternatives should be taken into account. But in any event that is obviously more of a debate about what is the socially optimal policy, and there is obviously a question as to whether that is the test that we are looking for here.

PROFESSOR WATERSON: Thank you.

The second follow-up point, Dr Niels referred to an Oxera study, I think. Can you please just say very briefly, Dr Niels, is this a study that compares elasticities on the customer side versus elasticities on the merchant side?

DR NIELS: Sorry, I believe you it was Mr Holt who referred to the cardholder survey that Oxera had done. But yes, I think I know what the question is aimed at. It was also part of the questions about what is the empirical evidence --

PROFESSOR WATERSON: Yes.

DR NIELS: -- on cardholders.

So Oxera did, and this was also way back at the time of the OFT investigation, various things. So Oxera did a cardholder survey, then we did -- and there were others who did cardholder surveys as well, and there was evidence coming out of that showing, just confirming the low willingness to pay, limited willingness to pay card fees by consumers.

So that is consistent with other -- there is other evidence out there. Mr Holt mentioned the ECB etc.

What we also did, and this is not I think in evidence for Trial 1 because it was not really the focus of Trial 1, but it has been mentioned before and referred to in previous retailer litigation. But Oxera and EDC, the consultant company who used to do, or still do Mastercard's costs studies, we also carried out what we then labelled the mini Baxter and maxi Baxter studies, which did precisely that. They tried to look in the round at all issuer costs and revenues and all acquirer costs and revenues to just verify where that -- how that imbalance lies.

So if -- indeed, I would suggest if you, as the Tribunal, are interested in the overall -- so taking into account all issuer revenues and costs and all acquirer revenues and costs, that is the sort of study one needs to look at, and that study, the maxi Baxter, also confirmed that there is a cost imbalance and revenue imbalance driven by differences in willingness to pay and differences in where the costs are incurred in the scheme, and they broadly confirm sort of the direction and levels of interchange.

PROFESSOR WATERSON: Thank you.

Mr Holt? Can you elaborate --

MR HOLT: Sorry, what is the question?

PROFESSOR WATERSON: If you have nothing to add, then do not feel ...

MR HOLT: I commented previously on the nature of the evidence about cardholder versus merchant sensitivity, so I think unless there is any further questions on that, that was really my view.

PROFESSOR WATERSON: Yes, Dr Frankel.

DR FRANKEL: I said before the break I was trying to help everyone get to the break, but this price sensitivity question, I do have a few thoughts.

First of all, it is true that -- I believe it is true that cardholders show more sensitivity to fees when those fees are salient. So when you are -- meaning if you are faced at the point of sale by a merchant who says if you want to use that card, I am going to add a 2% surcharge, many consumers will switch.

In Australia, there is a lot of evidence, payment diary evidence from the Reserve Bank, for example, that shows that when confronted by a surcharge on a credit card, many consumers switched and used the debit card instead that did not draw a surcharge, a much lower cost to the merchant.

Other fees to cardholders are less salient. So these foreign transaction fees that I refer to in my report, what they used to call currency conversion fees even when currency was not being converted, originally they were just buried in the transaction amount and there was no consumer response to those.

Then because of litigation they ended up showing those fees on statements and in other materials, and they became somewhat more salient and you see banks competing with respect to those fees as a result.

With respect to merchants, they tend not to be responsive to the level of fees, in part because of all the restrictions on their ability to send those signals.

PROFESSOR WATERSON: Thank you.

Mr Dryden, do you want to say anything on this?

MR DRYDEN: Yes.

So in terms of relative sensitivity, I think I have already explained that on the acquiring side of the market, the merchant is quite insensitive to the level of the MSC, and then that means the acquirer is quite insensitive to the level of the MIF for the reasons I have given and will not repeat.

We heard factual witnesses say that retailers say that they would pay the MSC even if it was extremely high. So it is evidently the case that there is insensitivity on that side.

Of course there is a cellophane fallacy point, which is that the scheme will push the MIF up to the point that the MSC is getting to the point that the merchant might start to think about declining the card. But in that whole region between a sort of competitive level and factual level, it is insensitive, which is why the MIF goes to the level that it does.

On the other side of the market, I mean, to some extent we do not worry too much about how sensitive the cardholders are because -- for the following reason, which links to my previous answer. If the issuing side has been oversubsidised, so if more MIF is coming across than can be justified on the basis of the externality, and it is providing cardholders with lots of benefits etc and if they are sensitive to the removal of those benefits, that is not a problem.

PROFESSOR WATERSON: No. Thank you.

Moving on. I wanted to raise a point which you will know that Mr Knupp, the representative of Visa, a senior employee of Visa, was giving evidence and now this has moved around a bit in the transcript, but I think everyone has agreed that it is now not part of the private session, but I am sure Mr Kennelly will pop up immediately if I get it wrong.

So the question that came from Mr Tidswell was:

"Well, you would have a default settlement at par scheme which would be perfectly operational?"

Mr Knupp answered:

"Yes, but we -- I mean, the network would never have gotten off the ground had we done that. So I think that most people would accept that that is why the system got off the ground."

"It is a somewhat different question though about whether the system would survive changes at the present state of development, if you like. I mean, clearly when the system is getting off the ground you have to engage very closely with issuers and to some extent with acquirers and certainly with merchants in order to get the system off the ground. But once the system is off the ground, the engagement need not be as intensive."

"So in developed markets electronic payments are ubiquitous ...(Reading to the words)... and governments or other bodies could enforce a lower transfer price, if you will, just understanding how the balances on the different sides, right. So you have a lower price to merchants at lower exchange rates ..."

He then went on to say:

"You know, that is not consequence free," and he elaborated on that.

So I would like your reaction to that exchange and maybe we will start this time with Dr Frankel.

DR FRANKEL: It is often said that, you know, maybe you need a MIF when you are first getting started as a kind of subsidy to get going, but maybe not later on. People ask this question often.

First of all, it is revealing in the sense that it recognises that what this does is create a subsidy. This takes money from somewhere else and uses it to incentivise the use of this system.

I think there is pretty good evidence that even in the early days of card schemes, MIFs were not necessary. Issuers certainly preferred to get MIFs, so they gravitated towards the schemes that offered the MIFs, and they, in many cases, have abandoned the scheme that did not offer them MIFs. But those -- a zero MIF of par settlement schemes often did quite well. Canada had -- it was the most popular payment system in Canada. Visa Canada wanted to co-brand on the Interac cards in Canada to try to get their -- their own debit card launched because it was ubiquitously used in Canada and they had no MIF.

PROFESSOR WATERSON: Thank you.

Mr Dryden?

MR DRYDEN: Yes, I think the argument is sometimes made that a MIF in the opposite direction could help a scheme get off the ground, because when you are at the sort of genesis of solving the chicken and egg problem it may be ambiguous which way it goes. I am not sure I have never really looked at that.

I would note that the Mastercard 2007, I think, decision which presumably pertained to a somewhat -- in itself was quite a long time ago and itself pertained to quite a historic period including, I think, the application of the intra-EEA MIF for at least a few countries because it was the domestic MIF, that is taking you quite far back in time to a much earlier -- including in countries that are sort of less advanced than the UK in terms of payment means, and even at that point I think the MIF was always flowing in the direction that we are familiar with in spite of the much, much greater prevalence of cash, for example, at that point in time.

PROFESSOR WATERSON: Mr Holt.

MR HOLT: Sorry, I have to move the microphone to be able to see you. A little bit.

I think this is the question as to whether a MIF might be appropriate to sort of solve a chicken and egg problem to try and get the scheme up and running, but may not be necessary under a mature scheme. I do not think it is correct to treat it in such a binary way.

I can see that there could be a case for a higher level of MIF if there is a specific chicken and egg problem that you do need to resolve as a scheme, and as I mentioned I think before the break, as far as I understand in the early years of the scheme the MIFs were indeed much higher. I think 6 or 7%.

PROFESSOR WATERSON: Mr Knupp said so, yes.

MR HOLT: That may well have been in part due to help resolve this issue. But as one can see, they have obviously come down a lot over time reflecting changes in the cost revenue balance issues and the competitive dynamics.

So I think it is a bit of fallacy to treat it strictly in a binary way.

I think -- I mentioned in terms of discussing what the rational for the MIF is, again before the break. A number of those I think do apply on an ongoing basis. They relate to the issues around obtaining the appropriate revenue cost balances I mentioned before. But also in terms of optimising around issues of the cost of fraud and how that cost is allocated, one can also point to the fact that it is not a static product but one that innovates over time and brings out a series of new innovations over time; for example, going from EMV, or chip and pin, to contactless.

So there might well be dynamic issues that need to be taken into account, and the MIF can help provide the business case for the issuing side.

Of course, those are again some of the intrinsic sort of properties that might justify the MIF, but there is also the competition based ones, and of course the competitive environment is important. One can perhaps say, well, cash is not a particularly strong rival.

It is sort of notable, I think, that it is only in recent years that cards have overtaken cash by number of transactions. That happened quite recently.

But I think even more to the point, the majority of card transactions are actually C and P ones, if I understand it correctly, and of course cash might not be the most direct competitor in that case, but other card schemes are, and indeed the buy now pay later and the digital wallet options are. Again, those have higher costs in general for merchants and adopt essentially a user -- sorry, a merchant pays model, dealing with the very same cardholder or user sensitivity to price issues that Visa and Mastercard schemes are dealing with.

So I think finally, just to sort of pick up on the idea that zero MIF schemes clearly have existed, and in some cases do exist, Interac being one of those examples. But a number of them have been abandoned because of the costs of investment associated with merging modern payment regulations. So the European SEPA regulations led to a requirement for investment on scheme participants which is essentially deemed too high, given the commercial environment within which those schemes are operating. So this is the Pankkikortti Finnish system, as an example; Laser in Ireland, I think, too and at least I think some proportion of the attribution of the impact that led to those schemes being abandoned was the fact that they did not have an interchange fee model to support investment in business cases from the issuer side, and of course there is other debate about, well, which model is most appropriate in terms of bringing out innovation.

PROFESSOR WATERSON: Would scheme fees not cover that instead?

MR HOLT: Well, positive scheme fees to the issuer side would not cover that. I do agree with you that negative scheme fees to the issuer side would largely resolve that. So that comes back to our scheme fee negotiation counterfactual which, in my view, would broadly if, for whatever reason, that were deemed to be different in terms of having restrictions compared to a MIF actual world, but would nevertheless in my view lead to a similar amount of transfer across the sides, then yes, I would agree that that would potentially have been a way to resolve that. But obviously that was not adopted.

PROFESSOR WATERSON: Dr Niels.

DR NIELS: So, Professor Waterson, I have indeed heard you ask the question a few times in the last days about the difference between new networks and mature networks. I think it is also helpful to go back to the network economics literature.

In the network economics literature there is a phenomenon indeed called critical mass. It is recognised that new networks need critical mass. I have written papers about this myself.

PROFESSOR WATERSON: Yes.

DR NIELS: Which means if no one else uses a network, then you will not join as a user either. But once you have reached critical mass, then the network sort of takes off by itself, and that is why you get these phenomena like introductory pricing, giving away the product for free to get users on board fairly quickly. So that is well-established.

But it is also established that in two-sided platforms there is a continued need to keep both sides on board, and therefore you do see even for very mature two-sided platforms, you do see this continued skewed pricing structure, in particular where they compete, as is the case here, with other platforms. So from that perspective I do not think you can say just because, you know, credit card, debit card payments are now mature they do not need an interchange anymore. They very much do.

PROFESSOR WATERSON: Thank you. So this leads me --

MR DRYDEN: May I make one follow-up remark?

PROFESSOR WATERSON: Yes.

MR DRYDEN: I just want to make sure I am not misunderstood.

I mean, it is possible that in a mature system there could be an innovation rationale for the MIF on an ongoing basis. But that has to be, to my mind that has to be proven because it is not at all obvious.

So in a mature system the problem that

I have described on the acquiring side of the market is going to be quite acute, because a merchant turning down a card is going to be very liable to the business stealing effect from our merchants and they do not have the price signal to steer customers.

So in the mature environment they are exposed to the MIFs being quite high, as we have heard from the factual witnesses. It would in a sense be a huge coincidence if the level of the MIF produced by pushing the merchants as far as they can be pushed happened to be the efficient level of the MIF to give the right level of incentives for innovation or subsidisation of the card offered to correct that externality I was talking about before.

So it is not that these things are impossible in the kind of steady state of a mature scheme; it is just that it sort of -- it is a huge leap to observing that they are possible to them justifying the MIF at the prevailing level.

PROFESSOR WATERSON: Thank you.

So this, as I say, leads me on to a more specific question, which is still related, and

I want to put up two diagrams. I think both, one at least is confidential but I think these come from your own reports so you will have seen them amongst yourselves.

One is at {RC-H1/1/91} and it is a diagram from Dr Frankel, and the other one is a diagram from Mr Holt which is {RC-H4/4/177}. If we could have both on the same screen I think that would be useful.

Can we have both on the same screen? {RC-H4/4/177} Thank you.

Good. The question that I wanted to raise related to these two diagrams is, if you recall, the IFR came into force on 9 December 2015 and both figures span, to a differing extent span before and after, and there has been a lot of discussion, for example, in various places about death spiral and American Express.

So the first question is: can we see any changes to American Express's share as a result of the movement downwards of the MIF relating to the IFR?

Dr Frankel?

DR FRANKEL: So my take on these trends is that American Express has not, except in a very transitory way in Australia and I do not think in a meaningful way in Europe, increased their share in the short-run, and then Amex ended up losing share because of having to abandon their GNS, their programme where they had other banks issuing their cards.

PROFESSOR WATERSON: Yes.

DR FRANKEL: But they have not replaced that with their own issuing efforts. So their overall share has declined, notwithstanding a very dramatic reduction in MIFs in many European countries.

PROFESSOR WATERSON: Right. Thank you.

So, Mr Dryden?

MR DRYDEN: Yes. As far as I know, there have been -- well, in the interests of time I do not have much to add to that answer. That makes sense to me.

PROFESSOR WATERSON: Okay, thank you.

Mr Holt?

MR HOLT: I think obviously one can see from looking at the graph on the left-hand side that Amex did not gain any significant at least market share and ultimately reduced, I think.

I would note that that is in relation to -- this seems to be overall card transaction value, and obviously the IFR was in relation to consumer domestic and intra-EEA.

So I think the fact that the regulatory cap applied in that context and also applied to Amex GNS are relevant contextual factors to take into account when assessing, to the extent that you are wanting to use this as an illustration of what might happen in the counterfactual in these proceedings, I do not think that would necessarily be the case.

I would also -- you might have a question on the right-hand side. I note that those are commercial MIFs as opposed to the MIFs that were subject to the IFR. Just to make sure that you are aware of that.

PROFESSOR WATERSON: They are commercial MIFs and they remain more or less static, as we can see.

DR NIELS: Yes. Maybe just a few brief comments.

I think in this case it is always very important when we talk about MIFs that we are very specific about which are we talking about:

commercial, interregional or post-IFR?

The question of Amex as a competitor and as a threat is primarily relevant in this Trial 1 for interregional and commercial, and both interregional and commercial, we saw from the factual evidence that Amex is a significant competitor. So that is my first observation, and the other point is similar to what Mr Holt made.

If you look at the IFR overall, which is of course a consumer or -- yes, consumer MIFs -- I cannot now recall if that is the right term. But of course one competitive dynamic that changed there is that Amex was also covered by the IFR in countries where it was large enough, and therefore Amex or -- I do not know if therefore, but certainly in the period Amex has now dropped, as Professor Frankel also mentioned, the GNS model.

So the competitiveness of Amex, the competitive strength of Amex in that space has also been curtailed post-IFR. So that is another reason why perhaps you do not see, at least in certain data you do not see this big effect on Amex.

PROFESSOR WATERSON: You see a death spiral?

DR NIELS: No, you do not see a death spiral because all three of them are, are captured by the IFR.

PROFESSOR WATERSON: Thank you.

MR DRYDEN: If I may come back in, I think if one is looking at -- for the impact on Amex, as far as I am aware there may be four examples. There is the IFR, which obviously relates to domestic and intra-EEA MIFs, and I agree it is right if the MIFs are of one type we should be looking for market share impact of corresponding transactions. So there is the IFR. There is the interregional MIF commitments, there is Australia, and then I think there may be something in New Zealand.

I mean, each of those examples has to be looked at in detail. I am not aware that any led to a very significant shift to Amex within the corresponding markets. But of course they each have to be taken on their merits for whatever market they relate to.

I mean, it was the case that when I did

the previous interchange cases that Amex -- that the -- that the suggestion was that Amex would capture a huge share of commercial cards if the -- sorry, of consumer cards, forgive me, if the MIF came down.

So although the argument is now made about commercial and interregional, the argument has in the past been made about Amex within consumer, and that does not appear to have materialised.

PROFESSOR WATERSON: Thank you.

My follow-up to this is later on in, I think it is round about page 180 -- again, Mr Knupp was talking -- of the transcript on Day 7, and broadly speaking what he says here is regarding interchange fees, issuers want them high and the merchants want them low, and I think we all accept that, that issuers want interchange fees to be high and merchants want them to be low.

So the objective is to try and get the balance right. It is a bit of a blunt instrument. The market will tell you whether you have the balance wrong {Day7/112:9}:

"... [if] we have a lot of merchants that today do not accept our rates ... our pricing structure is not working for them and so ... we often have to introduce lower rates to bring them into system.

"... how do we provide a great value process for the issuers to get the most cardholders? When it is out of whack, we will lose cardholders on the issuer side to a competing network or we will not have the merchant acceptance ..."

Now, given that, this led me to think about whether we have seen firms exiting the issuing side in response to this rebalancing created by the IFR, or not? Have we seen -- you know, if he says we want to keep the acquirers happy and the merchants happy, suddenly there has been a big change to the merchants there, they have had to receive less and the acquirers have had to pay less.

So have we seen an exit of issuers in the market? Have we seen a growth in acquirers as a result of the IFR?

Dr Niels.

DR NIELS: So Mr Knupp's dynamics that he describes there, those are consistent with my understanding of how the dynamics work and the way I describe it in these systems.

Actual evidence after the IFR of entry and exit I have not assessed, partly I think because it was not really the focus of the expert reports in Trial 1. So I have not analysed it.

What I have seen, and I think this has come out in the factual evidence, is that certainly the business model and the economics for issuers has changed. So, for example, there are fewer cardholder benefits in aggregate being offered. But other than that, this is factual evidence that I have not looked at.

PROFESSOR WATERSON: Right. Thank you.

MR HOLT: Yes, similarly I have not looked at it, but I think the context points that I made earlier as to the nature of the IFR by reference to the appropriate counterfactuals in these proceedings are quite relevant; in other words, which MIFs did they apply to? What was the competitive context within which the card schemes were operating, and in particular to what extent did the regulation affect one scheme or one scheme model as opposed to a wider set of models? I think on those grounds, one, in my view, should not overweight the evidence relating to the IFR as a relevant counterfactual for the interregional and commercial MIFs.

PROFESSOR WATERSON: Mr Dryden?

MR DRYDEN: Yes, this is a two-part answer.

Just firstly going back to Mr Knupp's characterisation. You know, I understand that it can be the language that becomes routine or adopted in terms of talking about balance, but it does not quite make sense to me. I think Dr Frankel referred earlier to the idea that we have to be careful about what does balance mean.

As an economist, you would normally think of a firm maximising profit or maybe it is trying to maximise output. I do not think Visa has a sort of an ultimate maxim and an ultimate objective when it gets out of bed in the morning of balance. My objective today is to be balanced.

So the dynamic, which I think was also

described by Mr Knupp and others, is the one that I think I have tried to describe earlier. If you are profit maximising or output maximising at the same time as trying to be universal, you push the MIFs as high as you can on the merchant side. I think you described that in the transcript. You push up to that point. You are careful you do not go too far, but that is sort of the point of resistance that you are sort of approaching, in order to get as much across to the issuing side as possible, to be competitive on the issuing side.

So I think that is an economics framing that is, to my mind, slightly more illuminating than kind of an abstract notion of balance.

In terms of what we then see on the issuing side if MIFs come down, I have not looked at that. I have not looked at that very closely. I would expect as MIFs come down there to be some reaction on the issuing side. Traditionally it does not form part of the 101(1) analysis. To a great extent that is out of the market, so I have not looked at it and I would reiterate what I said earlier. If, for example, some issuers exit -- even if one had the exit of some issuers on that side of the market, that would not necessarily be inefficient. In fact, that could be efficient if their presence there had only been because of an excessive subsidy.

THE PRESIDENT: Dr Frankel?

DR FRANKEL: So I have looked at this.

First of all, Mastercard 2007 decision quotes at some length Mastercard's general counsel. I was actually at that hearing where he spoke and I remember it quite well.

He said that what Mastercard does when it does its cost studies and tries to do all this work to figure out where to set the MIF, because he was being pressed about how does this work, and he got -- and what he said was: Mastercard tries to set it at the highest level possible that does not create merchant resistance that they do not drop the card or they do not start surcharging or steering away from Mastercard.

So it is exactly what Mr Dryden is referring to. The idea is to get as much as you can from the merchants without having a serious loss of transaction volume.

When MIFs did fall in -- let me start with Australia, Mastercard consultants presented some data that showed that the number of Mastercard merchant locations in Australia accepting credit cards, Mastercard cards, went up by I think 40% roughly. I had to read their graph, but it looks like about 40% increase over the subsequent couple of years.

In Europe when the IFR went into effect, Mr Holt has explained that merchants, many merchants that did not formerly accept credit cards starting taking credit cards. He interprets that as merchants have choices. When the fees go up they can leave it. I go in reverse: when fees came down, more merchants accepted the cards.

In the United States there was a tremendous reduction in the level of debit interchange fees with what we call the Durbin Amendment, and there were all these predictions that banks are going to stop issuing debit cards. What are they going to do competitively? They are going to tell their customers go back to cheques? No, they all continued to offer debit cards and debit volume in all these -- credit card and debit card volume in all these countries has continued to grow.

PROFESSOR WATERSON: Thank you.

Apologies for asking that question, but the question is just if you were not thinking about this. But it just seemed to be a natural question that an economist would ask.

MR HOLT: Am I able to make a brief follow-up remark?

I think just a couple of points that Mr Dryden and Professor Frankel raised, one related to the notion of balance and whether the schemes are sort of getting up and aiming for that as their ultimate objective.

Obviously if it is a means to an ultimate objective, I am not sure why that distinction is particularly important. So as long as it is a relevant consideration in how they are determining not only the interchange fee, of course that is one aspect, but they have a whole series of other aspects to the contractual arrangements with the participants; what is the basis of fraud allocation, and all these other things. They are all interconnected, and obviously I think it is probably not particularly contentious to say that they are optimising for the success of their own scheme. They have no particular reason to try and optimise anyone else's success. But if balance is a means to obtain that, I think it does not necessarily mean that it is less relevant.

Professor Frankel referred to the impact on acceptance. I think in some countries maybe acceptance is lower than it is in the UK. I think that particular example might have been from Italy.

I think the other point here is that it is a bit difficult to necessarily attribute changes in acceptance to one particular factor, because this was of course at around the time that contactless technology was becoming more prevalent, and I would expect that that would also have an impact on acceptance because of the increased -- ultimately the increased desirability on the part of cardholders to use that.

PROFESSOR WATERSON: Yes. No, I agree.

I was just looking at this in a sort of two factor, but clearly there are many factors involved here.

MR HOLT: Yes.

PROFESSOR WATERSON: Thank you. I think that completes the questions I wanted to ask.

MR TIDSWELL: I just have a few questions. I think I am in the fortunate position that we have covered most of my questions, which is a very good thing because there is very little time left as well.

I just want to pick up a couple of points, if I may, though. Firstly, just on the acquiring market, and I think you should tell me if I have got this wrong, but I think there is general acceptance, I am talking generally, not about specific interchange fees, a general acceptance that merchants face significant market power because of the must take position.

Obviously one can argue about the extent of that and so on, but there is at least an acceptance of that, and that the impact of that is to create some upward pressure on prices.

I just want to check that I am not --

particularly Dr Niels and Mr Holt, I am not starting with a false premise that you would not accept. Can I just test that with you?

MR HOLT: Shall I start, because I think I have perhaps said more in my reports on this than I believe Dr Niels has done. Obviously he can speak for himself after this.

I have raised some question marks around the extent to which must take status applies at least in some contexts. I think for commercial it is not so obvious that it might be -- as might be the case in other contexts. There are a number of factors that I looked at. They were the availability of substitute payment methods that might apply.

MR TIDSWELL: Would you mind if I interrupt, because I do not want to get into the specifics of this particular --

MR HOLT: Okay -- I am happy to take.

MR TIDSWELL: This is the platform for follow-up questions. I wanted to -- I am certainly not trying to push you on the extent of it either, I am just really trying to -- let me ask the follow-up question and see what I want to understand is to the extent there is market power, let us put it that way, that does create upward pressure in some circumstances on prices for merchants, what is the root cause of that market power, where does it come from? It seemed to me there were a number of different options, it might be the nature of the rules, which I think is certainly what is said by the claimants, it might be the nature of the overall design and nature of the scheme itself, it might be the market -- it might be inherent in having a payment system or it might be something else. I just wanted to get your sense of that. I do not want to stop you if you wanted to address the underlying premise but if you think it is not completely wrong I am just interested in what it is that causes that feature.

MR HOLT: In the interests of time I am certainly happy to take that as an assumption and then comment on what the factors are that do lead to reduced merchant sensitivity.

MR TIDSWELL: Yes, that is a better way of putting it --

MR HOLT: I have stated that and agreed with it. I think that is merchants are competing hard with each other. They want to offer the best experience they can to their customers, they want to avoid payment frictions, they want to avoid losing sales and for essentially all of those reasons those are reasons why they might in general tend to accept multiple payment methods including several that are more expensive of course than Visa and Mastercard and they do that in order to offer the best experience and to maximise sales, I think.

MR TIDSWELL: So I think that is effectively -- you may not put it like this but that is what the category of it is inherent in having a payment system but if you have merchants accepting payments, they will be driven to that position; is that broadly right?

MR HOLT: I think it goes beyond the mere existence of the payment system, but the fact that retailer competition will lead them to want to provide the best service to their customers in order to maximise their sales and obviously in some cases if they are able to pass on that -- those costs in any event because there is extra value that is being provided to the user base, the customer base, then that is a further reason why they would be happy to accept.

MR TIDSWELL: Thank you. Dr Niels.

DR NIELS: Yes, I agree with Mr Holt and indeed it is one needs to be careful with the terminology here. There is a spectrum from "must take" to "should take" to "it is very attractive to take" and also as a matter of economics, a degree of pricing power and having a very attractive product that your customers kind of have to take or find very attractive to take goes hand in hand.

So the root of the pricing power that exists on the merchant side does indeed come from the value that these payment systems bring and the need, as Mr Holt says, for merchants to offer their customers choice.

MR TIDSWELL: Thank you. Dr Frankel.

DR FRANKEL: So I have again traced the whole history and -- I was interested in these issues. So market power and payment systems goes back through the ages. Governments issuing gold coins in this country had a monopoly, a legal monopoly, if you made your own gold coins the penalty was not pleasant and this is an important because I heard during the trial someone say that the government bore the cost of the cash system and in fact cash is tremendously profitable to governments. They print, you know, a banknote for a trivial cost and they buy stuff with it and they put it into circulation and that generates a tremendous amount of profit. What has happened is the profit from the cash system that goes to the government monopoly on cash has been transferred to the private sector into these private payment systems and they try to make structures to keep that inherent market power alive for the banks. Over the ages for the last 200 years we have seen this going from privately issued currencies where bank clearing houses got together to try to restrict competition, to then cheque clearing houses and then the card schemes are really the successor to the cheque clearing houses, that 120 years ago were often used to form cartels.

MR TIDSWELL: So, sorry, just to come back to the question, are you saying that that market power is inherent and the scheme -- or are you saying something different?

DR FRANKEL: I am sorry, so there is this inherent danger of market power arising in these markets. It is very easy for it to arise and why is it possible to exercise market power against merchants? Why is it said there are "must take" cards, a term that arose here in the UK, the gross margin for most merchants even if they have a very narrow net margin like a supermarket the gross margin might be quite high so at the margin if you make another sale and you earn 30% profit margin on that sale, it does not take losing many transactions at all for you to decide: I am just going to pay the fee rather than lose the sale and we have heard about the benefits that merchants get in this trial and relative to the MIF, in that competitive market we do not usually expect to pay based on the value that we receive, it is not a willingness to pay that determines competitive prices in a competitive market.

MR TIDSWELL: Thank you, just to (inaudible) I said, Dr Niels and Mr Holt, I meant inherent in the market I am sorry I misspoke. Just so you are clear, I was not distorting what you said. Mr Dryden?

MR DRYDEN: Yes, I think I agree with some of what has been said. So the question is root cause of this market power. I agree that a necessary condition for this market power is that merchants are competing with each other and the market power gets greater the more merchants are competing with each other, that point has been made because the business stealing risk becomes greater. I mean, that can be put sort of benignly in the sense that the merchants want to therefore make their retail offer more attractive to customers in order to compete with other merchants.

I mean, that is a benign framing. The less -- the opposite of benign framing is that it is creating a situation where the payment scheme can extract some of the gross margin of the sale beyond the transactional benefit they confer on the merchant because of the efficiency of their payment scheme to the merchant.

So it is that ability to extract some of that value which is the competition problem.

It is not enough that the merchants are

competing with each other. There are two other factors that we need to have present and I think I have mentioned one of them already; that is the lack of surcharging. So if the merchants could and were surcharging, that creates a completely different dynamic of competition or has the potential to create a completely different dynamic of competition to what we would see. The schemes would start competing the MIF downwards because they want their payment instruments to be less surcharged in the merchant and that becomes attractive to the cardholder when they are deciding what card to take out. So the competition problem goes away with surcharging, it is the lack of this price signal in the market that is creating the market power problem.

The other condition that has to be present is a degree of single homing or preference among customers about which payment instrument they use. If all consumers on the right-hand side are multi-homing, so they have all the cards or they have all the different payment instruments and they are equally happy using different ones, then the merchant can kind of -- costlessly turn down one of those payment means and they do not suffer the business stealing effect, because the customer will use a different -- will use a different card.

So it is those things in combination, the merchant competition, the no surcharging and some degree of single homing or preference over payment instruments that creates the market power.

MR TIDSWELL: That is very helpful, thank you. I have one other question if nobody objects to that and I think I know the answer to this as far as Dr Frankel and Mr Dryden are concerned, so I think it really is a question for Dr Niels and Mr Holt. It is a balancing question that Professor Waterson explored with you and I wanted to drop down a level.

We have heard a lot of evidence about the importance of costs, the issuers' costs, in that exercise and I wonder if we could just spend a minute just talking about how from an economic point of view the schemes ought to be thinking about those costs when they are trying to set the balance. I think Mr Dryden and Dr Frankel say we should not be thinking about them at all and might want to disagree with that in a minute, but I think that is their position. But I am interested to understand what you think that the right approach to the setting of those costs are, so in other words how do you -- just to give an example, how do you identify -- if you believe they should be taken into account, how do you identify which costs should be allocated from issuers to acquirers, say, because they give rise to innovation or because they share the fraud risk or share the cost of a fraud risk and how do you distinguish that from costs which are really just about the relationship between the cardholder and the issuer and is that an exercise of allocation that needs to take place in order to get to the proper balancing?

DR NIELS: Yes, sir, if I can start. As I said before, the imbalance arises because there are more costs on the issuer side than on the acquiring side. Which costs are we talking about? Well, that is actually quite well-known because from the very beginning that is my understanding. We go back -- Professor Frankel goes back into history, I go back in history, from the NaBanco case in 87 in the US, out of that, that is my understanding, came the issuer cost methodology that Mastercard has applied as a proxy methodology to precisely to identify those costs. This has also been described in last week's Merricks judgment, in what role did they play? The MIF was not set at the level of cost but they played a role in thinking about the right levels of MIF.

Those -- those issuer cost studies focused on three very specific categories of costs and I think it is helpful here to indeed look at them because they are the processing cost, the costs of the interest free period and the costs of the payment guarantee which then includes cardholder default and fraud. So it had always been quite well understood that those are three relevant categories of issuer costs. Indeed, my understanding is also that those same three categories of costs were the basis for the Visa exemption decision in the early 2000s by the Commission. It allowed Visa to set MIFs at the level of those three costs. So that would be my answer to your question is those are three relevant categories of costs to be considered.

MR TIDSWELL: Once schemes have undertaken that exercise to identify by some cost study what those costs are, by reference no doubt to transaction, is that then -- how does that then get incorporated into the balancing exercise? Is that a matter of judgment at that stage?

DR NIELS: Factually my understanding is there is a lot of judgment involved at that stage for sure and that that judgment is driven by other market factors, competitive conditions, indeed the factors that we talked about earlier so, you know, which are the payment schemes are there to attract issuers, so at what level do we need to set that MIF, but also factors of cardholder willingness to pay and indeed pushing back by the acquiring side and merchants.

MR TIDSWELL: Am I right in thinking, I do not think -- I may have missed this, but I do not think you referred to in the list of the conventional costs things like rewards and benefits that might flow to a cardholder like rewards.

So just to be clear, would you consider those to be things that should be sitting on the common balance sheet to be allocated or are they things that sit more for the issuer?

DR NIELS: I think they are also -- and actually I agree with Mr Dryden. One competitive dynamic there is that those costs or revenues for MIF can be used by issuers to make their product more attractive so indeed offer rewards, etc. That does play part of the overall balancing.

But the three categories of costs that I mentioned that have been sort of historically always been referred to indeed they do not include explicitly the rewards, etc, other than of course the interest free period is a -- is an example of a benefit to the -- to the cardholder of credit cards and charge cards, that is then included in the costs as well.

MR TIDSWELL: Yes. So do we end up with two categories of costs that fall into consideration; one is costs which are, for the most part, part of the operation of the scheme, in other words necessary in order to make it work, like fraud prevention and I think you would include the interest free period because it has got a -- it sits in there as a fundamental feature of the card, so those are necessary things for the scheme to operate and then you have got other things which might create overall incentives for the benefit of everybody in the scheme, that is the second.

Would you be able to separate them conceptually like that or would you say that that is a difficult thing to do?

DR NIELS: No, I think conceptually that certainly is an element of -- you know, they are slightly different in nature, so it is useful to maybe in that sense separate them. The actual functioning of the system, the processing, etc, fraud and then the benefits.

But in practice there is also a degree of overlap and indeed endogeneity. The scheme can design itself in its own way and for example the payment, the immediate payment offered to merchant, that can be changed and then you get -- again you get different cardholder costs. But I think it is a helpful way of looking at it for sure.

MR TIDSWELL: That is helpful. Mr Holt.

MR HOLT: Sure. So I think one further point to add, I think, is that the structure that the scheme adopts will be in relation to all sorts of contractual obligations that are respectively imposed on the issuers and the acquirers will of course be adopted by the scheme in order to maximise the success of the scheme.

So for instance it may be that it is appropriate under certain circumstances to allocate fraud in a particular way and as the facts suggest more of the fraud liability tends to be applied on the issuers as opposed to on the acquirers and it may well be that there is a good reason for that because in that circumstance maybe issuers have a greater degree of control and ability to effect the outturn level of fraud for instance. So that would be a good reason why the sets of contractual obligations happen to fall as they do because those are interested in the scheme.

But of course that is in a first best world whereby you can also determine some of the other rules and one of those being the interchange fee level. In a situation where that opportunity is lost, for instance an intervention to say you cannot have an interchange fee, then I think you have to then re-examine what is the ideal structure in the second best world as to the allocation of some of those costs.

So I think that is really just to build upon the points that Dr Niels made as to the sorts of costs that might be relevant in looking at the costs in the cost revenue balance. It is also in the context of what is overall optimal for the scheme.

I think the other factor that again I think one really has to come back to is that there are competitive conditions that also are taken into account when thinking about the scheme.

So obviously there are some examples which the various expert reports have referred to as to cases where MIFs were either lower or higher as between Visa and Mastercard for certain regulatory reasons and those did lead to significant changes in outcome.

So I think one has to, I think, always recognise that competition which of course is not just between the four-party schemes but also with the other payment methods is also a relevant factor and again that comes back down to the debate about both the cost revenue balance that we are talking about here, but also the price sensitivity point. It is largely because cardholders have choices and compete in a market where they can make choices across different payment methods that the schemes have to react to that and if they do not react to that then that is going to have a significant detrimental effect.

MR TIDSWELL: Thank you. Dr Frankel, I do not think you state a position, but you are very welcome to comment on anything that has been said.

DR FRANKEL: I will try to keep it brief.

Visa back in NaBanco, it is true, argued that, as I recall, costs that were incurred by issuers for the benefit of the merchant should be covered by a MIF and they had a methodology and they said it was specific costs and I think they included credit losses in that MIF.

Visa then distanced itself from this argument that it was specific costs. Instead they went to this idea of balancing the overall incentives in the system and it was not to cover any particular costs. Mastercard meanwhile had adopted this cost methodology and continued to use it for a while and I think they then backed away from it. So it gets a little confusing, but I would point out just a couple things.

These same costs, processing costs, interest free period, fraud losses, credit losses are exactly how they explain why there is a 30% APR on some of the credit card interest rates, right? You do not get an interest free loan on the credit card and it is because of all these identical costs. When you look at the foreign currency fees that are paid by or the foreign transaction fees paid by cardholders they point to the fraud losses and the transactions costs and the like. It is the same costs that are used to justify all these things.

MR TIDSWELL: Thank you. Mr Dryden?

MR DRYDEN: Yes, this approach of looking at issuer costs, which I think has been called the issuer cost methodology, I mean from my point of view it has no economic underpinnings. It is ad hoc accounting, accounting approach.

It is as if we have a pile of costs and we have two jars labelled "Issuer Side" and "Acquiring Side" and someone is exercising judgment about which costs to put in which of the two jars in which proportions.

I think even in a version that -- I have not looked at it for quite a long time, but in a version I have seen I think there was a kind of two-thirds/one-third split of the entirety or some category of costs and Dr Niels said it is a matter of judgment and I agree. But I think it almost risks being arbitrary judgment to quite a big extent. I do not see how various experts could be lined up to opine on the right application of the issuer cost methodology because I think it is so judgmental and arbitrary because it does not have economic underpinnings and it has the endogeneity problem that I mentioned before, that the level of these costs in the first place is determined by what the MIFs have been.

There was some attempt to deal with history, but it kind of curtailed I think at some point in the '80s or the '90s. What happened in the first decade of this century is that there was an evolution in thinking, which I think took us away the issue of cost methodology as being helpful towards the thinking of Rochet and Tirole, which really established the framework that I have tried to explain a few times this morning, about the idea of a market failure on the acquiring side and the role of the MIF in solving the externality problem, and that is the right way to think about what this level should be and only by coincidence would one get there via thinking about issuer costs.

MR TIDSWELL: Just so that I am clear. It follows I think from what you say that if you are not allocating the cost they lie where they fall and on the issuer side that would result presumably in issuers reducing some of the benefits they offer but you would say that is just a function of a competitive market, is that right?

MR DRYDEN: If you -- if you allocate yes, I think the short answer to that is essentially yes.

Let me just make sure I am understanding correctly. I mean, if the issuer -- if more of the costs fall on the issuer before reallocation of those costs by a MIF and then you do away with the MIF so not only do they fall on the issuer but the issuer ends up bearing them, that will have consequences on the issuing side for the issuer offer. But that is efficient because the issuer offer may have been overly subsidised to an inefficient extent.

DR FRANKEL: Can I add one point that may actually help the other side? First of all, as I said before, it is arbitrary to say that a payment system benefits the merchant. It obviously benefits both parties to a transaction, if you have a cost-saving innovation like a card system that helps both sides to the equation. Where I think a MIF would be most defensible is, first of all, the merchant payment type of sale we talked about, I think that is unlikely to be persuasive for me, anyway. Where it might be more persuasive is if there is -- if there are really fraud protection measures that a merchant could undertake that it imposed costs on the issuers, that is the most defensible kind of cost to think of justifying a MIF but, you know, I would first exhaust the possibility that the acquirer already has an incentive to price that kind of risk to the merchant but if for some reason there is a market failure, and merchants are not given an incentive to take into account something that changes the costs of the issuers, or vice versa, it would be the most defensible kind of way to justify some sort of payment, maybe you just have differential scheme fees, you load more of your scheme fees on the merchants that use the bad transaction technology with no net revenue going to the issuer.

MR TIDSWELL: Mr Holt.

MR HOLT: Firstly I think I agree with the fact that you could obviously use scheme fee variations to achieve some of these mechanisms as I mentioned before. I think I just want to offer what might be a correction, perhaps I misunderstood Mr Dryden, but when accounting for, for example, certain costs under an issuer cost methodology such as fraud costs and then saying some of those could be in a sense allocated because they lead to benefit for merchants there may be a very good reason for that, in other words having the ability to manage the fraud situation and have the cost of that being incurred by an issuer can lead to merchant benefits in the sense that the sale is facilitated, so the merchant gets advantages from the gross margin that they gain on that even though the cost of the fraud has been incurred by the issuer.

I do not think that it is correct, however, to say that if you go down a route of saying: well, there might be -- that might be part of the basis for the revenue cost balancing exercise to suggest that that has somehow inefficiently redirected the actual sort of costs associated in the scheme, obviously you are not actually saying: well, now acquirers should be directly responsible for managing and bearing the costs of the risk, that is still levied on the issuers but there is a recognition of the broader effects of that.

MR TIDSWELL: So I think that example you gave before for the second category that I put to Dr Niels which is something which tends towards optimisation and greater benefit rather than something that was absolutely necessary; is that the way you were putting it?

MR HOLT: In terms of is the contribution made by merchants?

MR TIDSWELL: Yes.

MR HOLT: In order to support the cost of fraud that the issuers are covering, is that part of the essential nature of the requirement for an interchange fee or is that part of the -- you know, the overall sort of optimisation, i.e. it is commercially and competitively relevant to take into account. In my view, it is that, even if there is a technical distinction as to whether it is necessarily relevant.

MR TIDSWELL: Yes, it may be one of those situations hence --

DR NIELS: Just one really final point is just to say that I disagree with Mr Dryden that there is no economic rationale for the issuer cost approach to setting MIFs. I have elaborated on that in previous trials in the 101(3) discussion but I will not elaborate on that now.

MR TIDSWELL: Yes, I think that is helpful and I think we have probably all conducted the conversation on the basis that it is not a 101(3) conversation.

THE PRESIDENT: Indeed. Thank you all very much. Obviously we will be seeing you again when you are cross-examined and no doubt we will have other questions then but we are very grateful for the assistance you have rendered in the course of this morning. Dr Niels?

DR NIELS: May I just say very quickly obviously your first question on the list is kind of a very important question on bilaterals for the post IFR counterfactual. I would have liked to discuss that as well but I am hoping that I can come back to it in the cross-examination later.

THE PRESIDENT: Dr Niels, of course. I mean, this is a process not intended to replace cross-examination but to -- if anything focus it so that counsel can work out just how off-beam the Tribunal is in its understanding of matters and through cross-examination go about correcting it. So it is as much a process of communication this way as that way.

So we have been very assisted by your evidence this morning.

I hope that you do not need to respond to this that counsel have been assisted by our thinking so that you can either expand or contract your cross-examination or submissions accordingly. We will resume then at 2 o'clock with Mr Hirst, is that the plan?

MR BEAL: Sir, yes.

THE PRESIDENT: Very good, then 2 o'clock. Thank you all very much.

(1.19 pm)

(The short adjournment)

(2.00 pm)

THE PRESIDENT: Good afternoon.

MR JACKSON: Mr President, we do not propose to swear Mr Hirst again.

THE PRESIDENT: No, he does not need to be sworn again.

MR JACKSON: I will just call him to the front and then he can answer Mr Cook's questions. We should say that we have asked him to read his witness statement from the 2016 proceedings and also the portion of the transcript from Day 5 but nothing else.

THE PRESIDENT: I am very grateful, thank you very much. Welcome back.

MR MARK HIRST (recalled)

A. Good afternoon.

THE PRESIDENT: As you have heard you are still under oath so we are not going to reswear you, but I will hand you over for cross-examination.

Further cross-examination by MR COOK

MR COOK: Welcome back, Mr Hirst, you gave evidence previously on 21 February. Have you discussed your evidence with anyone since then?

A. I have not, no.

Q. Now, you submitted a witness statement for this trial which was signed on 26 October 2023, do you remember doing that?

A. Yes.

Q. On Day 5 for us but on the transcript we have that up as Day 5, page 75, {Day5/75:6} so you were asked a question where in relation to a:

"hypothetical scenario where Visa and Mastercard had not imposed interchange fees and instead acquirers could have tried to negotiate interchange freely with issuers ..."

Now, in relation to that scenario, you had not addressed that in your original witness statement, had you?

A. I do not think so, no.

Q. Why not?

A. I do not know.

Q. When were you first asked about this situation?

A. I do not recall.

Q. I mean, was it the morning of the trial, morning you gave evidence, several weeks beforehand, months beforehand?

A. So the question as it relates to the hypothetical situation?

Q. Yes.

A. Yes. So I think on the morning of the actual day, right.

Q. Okay so it was (inaudible)

A. When I took the stand, when I sat here in the witness box.

Q. Are you --

MR BEAL: Sir, I am sorry to rise, I am sorry, it is not Mr Jackson but it is potentially a delicate issue if this witness is being asked to reveal conversations he had with the counsel team which of course my learned friend well knows are privileged.

THE PRESIDENT: I am well aware of that, Mr Beal, I think timing-wise is fine.

MR COOK: I understand content is a different matter and I would never stray across that line but I think timing is quite important to know to ask so I am clear on the distinction where I should and should not.

THE PRESIDENT: I am keeping an eye on it. Do proceed.

MR COOK: Mr Hirst, I ask again: do you recall when this issue was first raised with you?

A. I do not know, no.

Q. You must have some feeling. Was it the morning of the trial? The morning you gave evidence?

A. On the day itself, right, because I answered the question.

THE PRESIDENT: So on the day, but you cannot give us the exact minute?

A. No.

THE PRESIDENT: Grateful.

MR COOK: But you think it might have been some time before that, do you?

A. No, on the day.

Q. So, be clear, do you think it was something that was raised before you at any point before the question was put to you in court?

A. No.

Q. It was not. Okay... so that was just your immediate instinctive response, not having thought about it?

A. Yes.

Q. Thank you. Presumably, then, you have not looked back at what you had said in relation to Tesco's position when you gave evidence on behalf of Tesco?

A. Well, not -- not before I first appeared, no.

Q. Okay. Fine. If we can go to page 72 of the transcript {Day 5/72:18} at line 18 you were asked about your time at Tesco. You were asked about your history, line 18:

"Question:Roughly how many years were you at Tesco?

"Answer:Ten years at Tesco.

"Question:During those years were you in charge of interchange at any point?

"Answer:I was indeed, probably for about six or seven of those years."

Is that accurate?

A. Yes, to the extent, you know, some involvement with interchange, yes, that is right.

Q. Well, no, you were asked how many years were you in charge of interchange at that point, was that accurate?

A. Yes.

Q. Okay, if we could have up on the screen document {RC-M3/1} which is your Tesco witness statement. If we could go to {RC-M3/1/3} of that, I think we have to go back to the previous page, page 2 you deal with your background at that time. Paragraph 5:

"My career background is in corporate treasury. Prior to working for Tesco Stores I was a management consultant ..."

So you joined Tesco in 2005, you talk about originally holding various roles in the treasury and payment function and initially for the first two years or so you were in internal audit function so you had no involvement in interchange during that internal audit role; that is right?

A. Yes, correct.

Q. Then you say:

"... in December 2007 [you] moved to the group treasury department as US and European Treasurer. I spent 2.5 years in this role reporting to Nick Mourant."

So basically one focus was looking at cost lines so you say you were familiar with interchange fees, you certainly were not in charge of interchange fees, were you?

A. It depends how you define that. So I get involved in interchange from day one of my move across to the group treasury team, yes.

Q. Let us go on to see what you say about that. Paragraph 7 onwards. So you then moved to Asia in September 2010 and then you were there for two and a half years. So then again it was a treasury perspective, you say you had some involvement with Visa Mastercard in relation to Asia and had regular contact with members of the procurement team.

So at this point your role again was still very much an indirect one, was it not?

A. No, but it still very much involved with interchange, yes.

Q. Then you talk at paragraph 8 of having assumed the role of global head of cash banking and payments and you were sort of centralising the roles, Tesco was centralising what was happening in terms of the knowledge in relation to payments generally; is that right?

A. Yes, that is correct.

Q. Then if we look at paragraph 9 you say there that your reporting lines:

"... as Head of Cash, Banking and Payments were to the Group Treasurer and the Group Head of Procurement." then:

"Prior to the creation of my new role, similar responsibilities were undertaken by Michael Fletcher."

If we go over the page, also previously Nick Mourant had been doing so.

So looking at that it appears basically the role of responsibility for interchange within Tesco UK was Mike Fletcher and Nick Mourant prior to your role in 2013; is that right?

A. Sorry, rephrase the question please.

Q. Looking at that you talk about basically you took over responsibility for interchange in 2013 but you talk about Michael Fletcher and Nick Mourant having been responsible prior to that so you had somewhat of an indirect involvement and you only took over responsibility when you moved to that new role, did you not?

A. No. I mean, my involvement in the interchange debate at Tesco was pretty much at the forefront, right. So Nick and Michael were the senior directors at Tesco at the time and they would have had most of the externally facing contacts with the schemes like, for example Visa and Mastercard Tesco was a big enough merchant to actually have a direct relationship but internally I was pretty much responsible for interchange matters as they covered my businesses so first of all in the US and Europe and then later in Asia when I was seconded to Asia as an expat.

Q. Okay. If we can bring back up the transcript of what you said at Day 5 {Day5/75:1} and you were talking there and you say in answer to the question you refer back to your time at Tesco and you say:

"Answer:I think that is a very thin margin business in a very highly competitive sector, especially in the UK."

Looking at Tesco gross margin, would you

recall that as being a figure of 6 or 7%, is
that sort of --
A. I was talking here about operating margins which is more about 1.5, 2%.
Q. What about gross margin?
A. I was talking about operating margins (overspeaking).
Q. Okay. What is the correct margin figure?
A. I do not know. I cannot recall.
Q. In terms of a business like Tescos probably the most important thing is turnover, is it not? You have got the fixed costs of the shop and you want to try and make sure that you have increased sales in that shop; is that right?
A. I am not sure shareholders would agree.
Q. You have all of those fixed costs, basically driving more footfall into your shops, more expenditure on balance that is going to be an advantage to the business, is it not?
A. What is the point of making all that turnover if you do not make a profit.
Q. Actually, you have got more people paying to contribute to those fixed overheads, have you not?
A. I do not understand your question, sorry.

Q. I suggest to you what is important for a business like Tesco is to make easy for its customers to pay; that is right, is it not?

A. I would say for shareholders and employees I think it is important that the business makes a profit.

Q. Yes, but in terms of being a competitive marketplace what is critical for Tesco is it make it easier for customers to shop?

A. Absolutely, but that is -- yes absolutely, that is a given, right.

Q. Yes, and it would essentially be very damaging to the Tesco brand if customers found it difficult to shop there; that would be a gift to Sainsbury's, Asda, would it not?

A. I totally agree, yes.

Q. Yes. Tesco would not have been happy if customers were being turned away because they could not use a preferred payment instrument?

A. Yes, which is correct, which is why I previously talked about "must accept" payment instruments like Visa and Mastercard

Q. If we can go to -- bring up again your witness statement from the Tesco proceedings, it is RC-M3 and if we can go there to paragraph 17

{RC-M3/1/5} you see what you said then:

"It is essential for the Tesco Stores claimants to accept payment by all types of credit and debit card including those issued by Visa, whatever the level of MIF payable in respect of such cards. It would be extremely damaging commercially for the Tesco Stores claimants were they not to make all of the necessary arrangements to enable them to process Visa debit and credit card transactions. I would expect the Tesco Stores claimants to suffer a significant loss of customers if certain types of cards were not accepted."

Essentially that is right, that is what Tesco needed to do was make it as easy as possible for customers to pay or it would lose business, would it not?

A. I think absolutely but you have no choice, right, when it comes to competition, you know, you cannot not accept cards if Sainsbury's and Asda are accepting cards. The domination of the market was -- you know, overwhelmingly Visa for debit cards and Mastercard for credit cards.

Q. Equally you would not want to turn down Barclays credit cards or HSBC credit cards, would you?

A. We did not -- we were not able to, right.

Q. I am saying you would not have wanted to, would you?

A. Why would we differentiate?

THE PRESIDENT: What is the distinction between a Barclays and HSBC credit card with a Visa?

MR COOK: For those particular banks you would not want to turn down cards that were issued by Barclays, would you?

THE PRESIDENT: But, I am sorry, are you not drawing a distinction without a difference? I mean, are you saying that there is a Barclays card which is --

MR COOK: Regardless of how it is branded.

THE PRESIDENT: Independent of the Visa or Mastercard logo.

MR COOK: No, just simply the cards issued by the high street bank, you would not want to turn down a group of high street bank customers, would you?

A. We would be indifferent to the issuer so somebody like Barclays would issue potentially Visa or Mastercard or both brands but we would not care as a retailer who the issuer was, whether it was

Barclays, Lloyds or anybody else.

THE PRESIDENT: Yes, I think the point you are making is that it is the participation in the Visa and/or Mastercard scheme that matters, not who is issuing the card.

A. Absolutely, yes.

THE PRESIDENT: Yes.

A. Absolutely.

MR COOK: But I make the point as well that you would not want any group of people who hold Visa or Mastercard customers to be turned away, would you?

A. Well, as I said, you know if we have taken the decision to accept both brands then we would regardless of issuer.

Q. You do not mention in your Tesco statement any surcharging by Tesco. There was not; Tesco did not surcharge, did it?

A. That is in the statement but it is redacted, it is confidential.

Q. Sorry, do not tell me what is redacted because I cannot see and I do not want to know about it, but that is more a matter of general knowledge that there was no surcharging by Tesco?

MR JACKSON: He has just said that is

redacted and confidential.

MR COOK: Well, I think I can legitimately ask as a matter of general knowledge whether it is redacted or not but Tesco did not surcharge 15 years ago whether it is included in his particular statements or not.

THE PRESIDENT: Mr Jackson, you are on your feet, yes.

MR JACKSON: I will leave it to you, sir.

THE PRESIDENT: I do not think there has been any harm done so far.

MR COOK: To be clear, I have not seen the redacted bit of the statement so I do not know what is in the redacted bit. This is just a general question I pose to this witness whether he had said or not Tescos did not as a matter fact surcharge. I cannot imagine that is confidential because everyone would have known.

THE PRESIDENT: All right. Mr Hirst, I want you to answer as fully and as frankly as you can, so if there comes a point where you feel that you are in answering the question straying into areas where you feel you would rather have a conversation with me before you answer, let me know. But I am going to leave it to your judgment in the first instance as to how you answer but I anticipate that you will be able to answer most of the questions without reference to confidential material.

So, please, try not to, but if you feel that you cannot properly answer a question, without reference to material that is confidential, then we will discuss it, but I think it probably is just creating problems that we do not need to address if you go to say something that you have just said is in a redacted portion, so before we get to that stage, I think I would like you to -- would like to know what the problem is before you answer the question, does that help you?

A. Yes, it does. Yes.

THE PRESIDENT: Okay. Mr Cook.

A. So, no, in general terms the policy would have been not to surcharge in line with other supermarkets in the UK and elsewhere.

MR COOK: Again that would just simply have put off customers, would it not?

A. Sorry, say that again?

Q. That would have just put off customers.

A. Yes, as I said previously, it would create enormous friction, yes.

Q. If we go to page 7 of your previous witness statement,{RC-M3/1/7} Tesco statement, it is actually page 8, if we go over the page. {RC-M3/1/8} You refer at paragraph 28 of your statement to potential ways that Tesco could try and reduce the level of -- you call it the SAF, that is the service charge, Merchant Service Charge?

A. No, sorry, I have to correct that so that means the Scheme Assessment Fee, so that is the fee that goes directly back to Mastercard and Visa -- do you mean MSC, the Merchant Service Charge?

Q. I am reading your statement, it says Tesco could try to reduce level of the SAF. I mean that you seem to be talking here about reducing the cost paid by Tesco, are you not?

A. No, so if you take it as a whole, so obviously we start with Merchant Service Charge and that breaks down into interchange fee, which was the bulk of Merchant Service Charge. Then it had scheme assessment fees, which went directly to Visa and Mastercard, and then you had the acquirer or the PSP processing margin or processing fee.

THE PRESIDENT: What exactly is the scheme assessment fee?

A. So a scheme assessment fee is effectively a fee levied by both Mastercard and Visa for a particular card type and this is again when it gets quite opaque because depending on the card type, which you would not know upfront as a merchant, different card types attract different scheme fees and it was always felt that you can never negotiate interchange. The only thing you could really move was the processing margin, if you had significant volume such as Tesco, so you could go to an acquirer like Worldpay or Global Payments and say: I have got all this volume, give me a better processing fee or margin. But you can never -- you can never negotiate interchange, but sometimes there were occasions where actually if you worked with both an acquirer and an issuer, so Barclays back in the day, you could potentially flex down your scheme assessment fees, but again, that was very much dependent on what the acquirer had negotiated with the schemes.

THE PRESIDENT: It is probably well known, but I will ask the question. The SAF that is part of the scheme fees that is paid ultimately to the scheme, not to the issuers?

A. Correct, yes, correct.

MR COOK: Fine. This paragraph after the bit in black I want to ask you about. First you start and say, "When I ran the tender in 2013..." and then it is blacked out. It says:

"... transactions where the issuer and the acquirer were the same bank were termed 'on-us' transactions. In theory it was possible to agree a lower MIF for 'on-us' transactions with the acquirer. I am not aware of any other situation where this actually occurred in the UK.

So even though Tesco was and probably still is the largest merchant in the UK it was not able to persuade an on-us bank to offer you a better deal, is that right?

A. Not as far as I am aware, no.

Q. Nobody else was able to do that?

A. Again, in the UK, not that I am aware of.

MR COOK: Thank you. Sir, I have no further questions.

THE PRESIDENT: Any re-examination?

MR JACKSON: No re-examination.

MR KENNELLY: Sir, I have actually, if I may --

THE PRESIDENT: Of course, I am so sorry.

MR KENNELLY: -- arising out of something surprising that Mr Hirst said at the beginning of his evidence. Very brief, sir.

Cross-examination by MR KENNELLY

MR KENNELLY: Mr Hirst, can I ask you to look back at the transcript of what you have just said to my learned friend. It is page 120, lines 5 to 12.

You were asked about the question in relation to hypothetical scenario where Visa and Mastercard had not imposed interchange fees and there had been negotiation freely with issuers. You were asked:

"You have not addressed that in your statement."

You said: "I do not think so."

Can you then be taken to page 122, lines 1 to 8.

Mr Cook asked you: "It might have been some time before that" and you said: "not on the day". Then you were asked:

"To be clear, do you think it was something that was raised with you at any point before the question was put to you in court?"

Do you see that, Mr Hirst?
A. Yes, lines 5 to 7.
Q. Yes, and you said no?
A. Yes.
Q. So you are saying that it had not been put to you until you heard it in court?
A. I think that is correct.
Q. I would like to show you a letter that your solicitors sent to Linklaters. Could this be given to the witness please. This was a copy was sent to the Tribunal yesterday. The Tribunal has this?
THE PRESIDENT: We have these.
MR KENNELLY: You have the letter already?
THE PRESIDENT: We have the letters regarding --
MR KENNELLY: It is already in the bundle. I am obliged.
THE PRESIDENT: I do not know if it is in the bundle. We certainly have the letters.
MR KENNELLY: It is an opportunity for Mr Hirst -- Mr Hirst in all fairness ought to see the letter.
THE PRESIDENT: He ought, yes.
MR KENNELLY: Thank you.

THE PRESIDENT: Mr Hirst, why do you not read those letters and then you will be asked a question.

MR KENNELLY: Especially the second paragraph, Mr Hirst. Please read that carefully. The second full paragraph.

(Pause).

A. Yes, I have read it.

Q. So you see here, Mr Hirst, that we were told by your solicitors that you were made aware, in advance, that you would be asked in chief about how you might have responded in a hypothetical situation if the card schemes had not imposed interchange fees?

A. Yes, on the day as I said. I think I said on the day, right?

Q. No. You said that the first you heard the question, the first you appreciated that the question would be asked was when it was put to you in cross-examination in court?

A. Yes, and I said on the day before that.

Q. So you were told about it on the day as well before you came into --

A. That is when I said I was aware of the question, yes.

THE PRESIDENT: Mr Kennelly, I think it was something of a car crash of questions coming from different lines looking at what the witness said at 120 and 121.

Certainly the impression I got was that he had had a conversation before entering the witness box about this on the day.

MR KENNELLY: Yes.

THE PRESIDENT: Unfortunately, we then had, quite rightly, Mr Beal raising the question of privilege and then we had a rerunning of the question and I think at that point a certain degree of confusion set in. I do not think there is any deliberate inconsistency, but let us just put this to bed now.

Mr Hirst, you are being asked about this subject before you entered the witness box and before you were asked questions in chief by counsel and what I understand, but correct me if I am wrong, is that you were told before you entered the witness box that this was a question that would be put to you in chief.

I do not want you to tell me anything about what was asked but you had a discussion with your legal team to warn you that that question was coming down the line?

A. That is correct.

THE PRESIDENT: Okay.

MR KENNELLY: I am obliged. I have nothing further.

THE PRESIDENT: Anything from --

MR JACKSON: No.

THE PRESIDENT: Mr Hirst, thank you very much for coming back. This time I will release you from the witness box with my thanks. We are very grateful to you, thank you very much.

A. Thank you.

MR KENNELLY: Mr Beal wants to go first.

MR BEAL: No, you go.

MR KENNELLY: Mr President, I reflected on the comment you made at the end of the hot-tub about the implications of what we have been hearing for cross-examination and of course I am going to go straight into cross-examining Mr Dryden tomorrow.

THE PRESIDENT: Yes.

MR KENNELLY: True it is that the discussion, in fact some of the discussion during the trial the witnesses of fact as well as with the experts today has covered matters beyond the scope of this trial 101(3), questions of pass on, but also a new counterfactual covering the possibility that instead of an interchange fee the externality could be cured by a transfer from acquirers to issuers potentially by way of scheme fees and it is not my intention to cross-examine on those issues because from my understanding of the case so far those are not in dispute.

We will cross-examine on the issues that are in dispute between ourselves and the claimants on the basis of the witness and factual evidence that has been adduced by them and that is still my intention for the purposes of the expert evidence that we will be hearing for the rest of this trial.

THE PRESIDENT: Let me just look at that. I heard it loud and clear. I am just parsing what you said.

So far as questions that are out of scope are concerned, 101(3), pass on, the reason I raised the question of pass on with the experts was explicitly to make clear that that was the domain of Trial 2 and it is pleasing to say that the experts did not feel inhibited in their answers by the contingent way in which I opened the hot-tub.

Otherwise we might have had an interesting issue for how we crafted the judgment going forward and it is something which we have in mind on this issue as well as the 101(3) point, that we are here concerned not with 101(3) or pass on issues and to the extent that there is, as it were, facts going to issues that are before us but also are relevant to Trial 2 we will have to tread with extraordinary care, so that is a given.

Your qualification about the counterfactual is I think rather more difficult because I do not think that any Tribunal, and certainly not this one, is going to consider itself constrained when working out what the appropriate counterfactual is by what is or is not agreed by the experts. I think you will know from what this Tribunal, differently constituted, said in Cardiff Bus where exactly this point was made saying you have got to choose between what the experts are saying; you cannot triangulate between them. Well, that got very short shrift, in my judgment rightly so, because it is not for the experts to dictate the course that the ultimate judgment takes. It is instead to inform it.

So I hope that gives you an indication as to what you ought or ought not to cross-examine on in terms of the counterfactual.

We will listen to the evidence in the round, we will listen very carefully to the questions that are put and we will conclude what is the appropriate counterfactual on the basis of the totality of the evidence having heard it.

MR KENNELLY: Indeed. Indeed, sir. My concern is more one of fairness. One does not want to constrain, one could not constrain the Tribunal exercising its proper judicial function.

The problem I have really is that this counterfactual has not been canvassed in the factual or the expert evidence. So while one can speculate and one can ask questions in general terms, I am rather handicapped because had it been pleaded and had it been raised I would have factual evidence dealing with the very interesting questions the President raised about what issuers would have done in bilateral negotiations with a scheme, what acquirers would have done had they been negotiating and developing the kinds of anti-fraud mechanisms that the President raised, we would have factual evidence dealing with those points and they could be tested in cross-examination. The experts, and the experts of the claimants, could also have addressed the implications of that factual evidence in their own reports and we would have a full suite of material which would allow us fairly to address that counterfactual before you.

So in asking whether it ought properly be put to the witnesses in cross-examination, the experts in cross-examination, there was a fairness consideration. Because I do not have the material for my own experts from and my factual witnesses that allows me fully and properly to cross-examine the experts on those questions my questions will be necessarily speculative and in circumstances where the claimants had not raised this counterfactual in their positive case, it is not in issue that particular counterfactual is not in issue between us. There is a question then about whether I need to test it in order to seek to refute the case that has been raised by the claimants.

I fully accept, sir, in Cardiff Bus it was possible for the Tribunal to come up with a different counterfactual based fairly on the basis of the material before it, factual and expert. But if it is not possible to do that because of the lack of factual evidence and the lack of properly informed expert evidence in reports the situation is quite different and that is why I am in difficulty.

THE PRESIDENT: At the end of the day, we have got to decide the issues before us fairly on the basis of the totality of the factual material before us, but of course this is a counterfactual, not a factual question.

So, yes, we hear what you say. We will take the view that we take when we write the judgment. Obviously questions of fairness will be paramount. You can take it that to the extent that we have concerns about what the proper counterfactual might be then we will ourselves raise it with the experts, but I do not think you should feel inhibited in asking what the possibilities might be if there was no MIF simply by reference to that which has been pleaded.

We are much more interested in testing what the economists say in terms of what their judgment might be as to what might or might not happen and that is of course something which is also informed by the legal structure of the system or the ecosystem that we are talking about and in the end it will be for the Tribunal to synthesise the various different strands of evidence, the legal, the technical and the economic and reach a proper conclusion.

So you must take your own course, but I do not think you will receive any push back from the Tribunal if you seek to explore the terrain more widely because the broader the picture that we get the better in terms of our decision-making.

If I can make a further point arising out of the experience that I had in Sainsbury's, more is most definitely better than less. We are not assisted by an artificial constraint on the evidence that we hear. We are much more assisted by an appropriately wide-ranging enquiry to enable us to make a correct answer subject of course to this being a fair process. But the fact is we are talking about a fair process in the context of market wide questions and that was the original problem with the three trials back in 2016/2017, where the outcome of the three trials were unfortunately inconsistent because the parties were different in their approach in terms of the evidence that was adduced in each case and that caused enormous difficulties for the first instance Tribunals in each of those trials and that is one of the reasons we have umbrella proceedings today; so that the range of evidence is appropriately broad so that a result that is going to bear the test of time across other similar cases is capable of being achieved.

MR KENNELLY: Indeed, sir. I just wish to raise that point having been invited to consider the scope of cross-examination by the President, my point is not a technical one. I hope the Tribunal can see it is something more serious, more profound because obviously the Tribunal has a lot of evidence before it but if that evidence is lacking in a material respect, which would allow the fair resolution of the issues that is obviously something that the Tribunal will take very seriously.

THE PRESIDENT: Well, indeed. You can take it that if we are seeing the counterfactual world in a particular way that is something that we will be flagging with you.

MR KENNELLY: Sir, in view of the time and the discussions I have had with my learned friends, could we start at 10 o'clock tomorrow. I have not explored this with my learned friends but I just want to ensure that because we know we have a hard stop for Mr Dryden, that is a reason why it might be advisable to begin at 10 tomorrow.

MR BEAL: Mr Dryden is not here now. If we can get a message to him of course that is not a problem, I cannot anticipate it being a problem, and certainly we have trespassed on this Tribunal's latitude. It is not for me to say, no, you should not sit early. It is very much for you, sir.

THE PRESIDENT: What is the hard deadline?

MR KENNELLY: There is no hard deadline in a strict sense. The idea was that Mr Dryden would finish before the weekend so he would not be in purdah. If he has to go into purdah for an expert that is normally less serious, but we seek to avoid that.

THE PRESIDENT: That is helpful. Let me make clear two things, first of all, we place a lot of weight rightly on the exploration of the issues orally. It is very helpful so we do not want anyone inappropriately to be cut back.

Equally, whilst we are very sensible of the burdens of purdah over the weekend we are significantly more relaxed about lifting it in the case of experts than we are in the case of factual witnesses. For the protection of the witnesses it is probably best that they stay in purdah, but if anyone is wishing to raise the question of lifting it for whatever reason we will be amenable to hearing that provided that the expert knows exactly where they stand and we can make that clear to them.

But we are very conscious that experts in cases such as this, as in most cases, fulfil two roles: they have their evidence giving function and of course they also have their advisory function in assisting the team who is calling them to prepare for cross-examination of the other experts and we are not insensible to that need, so we will certainly be receptive to applications to lift the purdah if that is appropriate.

MR KENNELLY: I am grateful. I have nothing further.

MR BEAL: Sir. I am sorry to rise.

May I just come back briefly on the point Mr Kennelly made. As I said in opening, the submission we make to this Tribunal is that the counterfactual is a multifactorial evaluation. It is a mixed question of fact and law and it is for the Tribunal so I am not seeking to withdraw from that position.

It was suggested I think that somehow it was my case that scheme fees could cover the distance.

Our pleaded case on counterfactual for the post IFR period for consumer debit and intra-EEA credit and debit is that it is default settlement at par. My understanding is default settlement at par is agreed to be the counterfactual for commercial and interregional. That of course does not tie the Tribunal's hands but we are not suggesting there is another counterfactual out there for any of those periods.

So our submission whether it is right or wrong has the benefit of consistency if nothing more. But I just wanted to put that marker down clearly as to what our pleaded case is so that there is no misunderstandings about what we are trying to do or what we are trying to say.

THE PRESIDENT: Thank you. Well, we will start at 10 o'clock tomorrow subject to expert availability.

I am reminded, but it will not be a problem, I have an 8 am hearing tomorrow but I will make sure it ends before 10 o'clock. It probably is doing everyone a favour that I have a 10 o'clock start.

MR KENNELLY: We are very sorry for you, sir.

THE PRESIDENT: Well, just pity the advocates. 10 o'clock tomorrow morning and

I particularly welcome that, so thank you very much.

(2.43 pm)

(The hearing was adjourned until 10 o'clock
on Thursday, 7 March 2024)