Sainsbury's Supermarkets Ltd v. (1) MasterCard Inc, (2) MasterCard International Inc, (3) MasterCard Europe S.P.R.L.

Day 13 Redacted

February 19, 2016

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Friday, 19th February 2016
(10.30 am)
(Open session)
MR JUSTICE BARLING: Good morning.
MR HOSKINS: Morning, sir.
MR JUSTICE BARLING: Good morning, Mr von Hinten-Reed.
A. Good morning.
MR HOSKINS: Can I just mention confidentiality before we start because there are going to be some confidential passages today --
MR JUSTICE BARLING: Right.
MR HOSKINS: -- where I will need for us to go in camera, if we get to pass through on Monday, which we hopefully will, that is all going to be in camera, because that's all Sainsbury's protected information.
MR JUSTICE BARLING: You expect that to be on Monday?
MR HOSKINS: I expect it to be on Monday, you asked me to let people know, so I flagged that up.
MR JUSTICE BARLING: I am sure that has been noted then, by those here, that Monday looks as though it is going to be highly likely that the court will have to sit in camera and now you are going to say that some of today.
MR HOSKINS: Some of today, but most of today will be open, it is just certain bits.
MR JUSTICE BARLING: That you don't feel you will be able to deal with sufficiently cryptically, as it were, so you will let us know when you get there?
MR HOSKINS: I will.

MR NILS VON HINTEN-REED (continued)
Examination-in-chief by MR HOSKINS (continued)

MR HOSKINS: Good morning Mr von Hinten-Reed.
A. Good morning, Mr Hoskins.
Q. Could you go to bundle D2.1 please at tab 3, which is your second report, page 466. It is paragraph 236. This is where you are dealing with your counterfactual and you say in the last sentence:
"There would be no commercial rationale in maintaining the Visa UK MIF above the established lawful level as any revenue gained from attracting MasterCard issuers would be lost in damages."
That assumption is only correct if one assumes that every single merchant able to bring a claim does bring a claim and succeeds, isn't it?
A. We are in the section -- 236 is in the section which is to do with damages and there we are assuming that the MasterCard UK MIF was deemed to be unlawful.
So the argument in the last sentence of 236 is that a sufficient number, it doesn't have to be everyone, would bring a damages action, such that Visa would determine that it would be in their interest to reduce their MIF to zero.
Q. So the words "there would be no commercial rationale" is actually too absolute: it depends on the number of people who would actually sue and it depends how many people Visa would think might actually sue?
A. I think that is correct.
Q. If Visa maintained a high MIF for a number of years whilst MasterCard had a zero or a low MIF, Visa would attract issuers to itself, we established that yesterday. If the Visa MIF was then reduced to the level of MasterCard after a period of years, it cannot be assumed that all issuers who switched to Visa would then switch back in any short timeframe to MasterCard, correct?
A. If you make the assumption that it is sticky on the way out, it must also be sticky on the way in.
Q. So I think the answer is yes?
A. Yes, I'm trying to explain that. Yes.
Q. Can we go to D2, tab 2 please. This is your first report. At paragraphs 440 and 441 you deal with the threat from Amex. So it is page 211 of the bundle, paragraphs 440 to 441. You see at the beginning of 441 you say:
"I have estimated, based on UK evidence mainly from MasterCard disclosure, that MasterCard would lose around 5% of its market as measured by the value of credit card transactions to Amex in a zero or low interchange fee environment."
In 440, just above, you say:
"Since the Duo card carries a fee, it is only fee paying elements of MasterCard's business that would be at risk."
Are you aware that Amex currently offers at least three different rewards based consumer credit cards without an annual card fee?
A. Yes.
Q. Are you aware that Amex currently offers two high rewarding consumer credit and/or charge cards without an annual fee in the first year?
A. I wasn't aware of that.
Q. If it is clear therefore that Amex does also compete with MasterCard's non-fee paying credit cards, is it not?
A. A portion.
Q. Equally, in the last sentence of 440, you say, since the Duo card carries a fee:
"Whilst all Lloyds Duo cards do now carry a fee ..."
Are you aware that that was not always the case?
A. No.
Q. Because for most of its existence the standard Lloyds

Duo card did not have a fee. If you can go to E3.14, at tab 272 you will see this is a Lloyds TSB press release dated Wednesday, 23rd November 2011. The first paragraph below the italics:

"Lloyds TSB is relaunching its reward credit cards and turning everyday spending into travel rewards. A unique feature of the Duo Avios credit card account is that customers are supplied with both an American Express and a MasterCard."

If you turn over the page you will see the editor's notes on page 2:

"Lloyds TSB premier Duo Avios ..."

Second bullet:

"... representative APR of 21.9% variable inclusive of annual fee."

Then the next one:

"Lloyds TSB Duo AVIOS, representative APR of 15.9% variable and no annual fee."

A. Mmm. So, Mr Hoskins, can I just ask -- I don't want to ask a clarificatory question, this press release, if I read it right, is the relaunching of its reward credit card, so they had the Duo before but apparently it wasn't that successful. That's how I read it. So we have two cards, as you say, one which now has an annual fee and the other one which is variable, without a fee.

Q. So I just clarify the last sentence of 440 of your first report isn't quite accurate, it says "since the Duo card carries a fee", but clearly at certain times in its history it didn't carry a fee, or certain aspects of certain types of Duo didn't carry a fee?

A. Right. The reason why I looked at the Duo card was in part because of MasterCard itself. So when I reviewed some of the documents that I had been provided with, I understand it was -- I have to be accurate here because it is MasterCard and its advisers BCG, I believe Mr Perez said it was the Duo fee paying card that was the threat. So, you know, that is the basis on which I have said 440. Now, if actually you see in 2011 that we have a card which doesn't have a fee, then what I have said here in the last sentence needs to be altered slightly.

Q. Are you aware that MBNA offers sole Amex cards under licence from Amex?

A. I understand that now.

Q. There's no fee for that Amex card; do you know that?

A. That is correct and MBNA, as I think we found yesterday, has a wish to try to get into less affluent cardholders.

MR HOSKINS: Sir, I'm afraid I have reached one of the confidential sections, I'm sorry, I'm going to try to limit it as much as possible but I also need to keep the

flow of my questions.

MR JUSTICE BARLING: Right. You are going to deal with what aspect now then?

MR HOSKINS: I need to look at various Boston Consulting Group documents and they are MasterCard confidential and I need to look at specific figures in them. It is not going to be effective if I can't ask questions in that way and the answer can't answer.

MR JUSTICE BARLING: I'm afraid -- probably people here are used now to this problem. I'm afraid those who haven't signed undertakings, who are not in the confidentiality ring we will have to part company with you for a while. We will let you know as soon as possible by removal of the notice when we have gone back into public session, thank you very much.

(10.42 am)

(End of open session)

(In camera)

(11.52 am)

(Beginning of open session)

Cross-examination by MR HOSKINS (continued)

A. May I have a small clarification, sir?

MR JUSTICE BARLING: Be careful because we are in open session now.

A. I will be very careful. When we talk about competitive

advantage in -- vis-a-vis American Express, whether it is the -- what you call the three and a half or the four-party or the three, bear in mind on the merchant's side part of the problem for Amex has been actually its acceptance, and that obviously before and after the regulation, so however this -- the impact of this -- and let's call it the discount rate for evermore, rather than confusing MSC, the discount rate has fallen, there will also be a change in the rewards and also some sort of impact on acceptance.

Mr Hoskins, sorry.

MR HOSKINS: No, no.

MR JUSTICE BARLING: Okay.

MR HOSKINS: Are you happy for me to?

MR JUSTICE BARLING: Yes, I think we are ready to roll.

MR HOSKINS: Can you go to D2, tab 2, which is your first report. At page 211, it is something we have looked at. It is simply paragraph 441, which is where you set out your estimate of the 5%. You say:

"I have estimated, based on UK evidence mainly from MasterCard disclosure, that MasterCard would lose around 5% of its market to Amex in a zero or low interchange environment."

I'm going too fast. Page 211, paragraph 441.

A. Apologies, I lost my page.

Q. No problem at all.
A. Okay, I'm in 441.
Q. It is the first sentence of 441, you say that:
"... MasterCard would lose around 5% of its market to Amex in a zero or low interchange fee environment."
A. Mr Hoskins, yes.
Q. Can we go to bundle B, tab 11, please? You should have there one of the information tables that was handed up to the Tribunal?
A. I do.
Q. Have you seen this before?
A. Not the last version, but I have seen a version of this.
Q. Thank you. If you go to page 3 of this, you see there is a table that's shaded, top left:
"Percentage share of cards issued, based on 1 above, 2(a) debit; 2(b) credit and charge cards."
Then (i):
"Based on number of cards issued."
(ii):
"Based on value of transactions."
It is that part of the table I would like it look at. So you will see:
"Based on value of transactions, MasterCard ..."
During the claim period, we see that MasterCard had a market share of between 40 and 60% of the credit card

market, correct?
A. So between 2006 and 2007 the 40 and the 46?
Q. I'm just reading across that row. So for the period of the claim from 2006 up to 2014, we see MasterCard's market share of the credit card market, based on value of transactions is between 40% and 60%?
A. Yes.
Q. Your evidence is that if MasterCard had applied a zero or low MIF during the period of the claim and Amex had maintained its actual level of merchant fees, MasterCard would have lost around 5% of its market share to Amex; is that correct? That's what we have just looked at at 441.
A. In 441 we lost 5%, yes.
Q. Of its market share?
A. Yes.
Q. 5% of its market share of 40 to 60% is around 2% to 3% of MasterCard's market share, that's what it would have lost?
A. Yes.
Q. 2% to 3% of the whole market?
MR HOSKINS: Exactly, of its share of the whole market.
MR JUSTICE BARLING: Yes.
MR HOSKINS: If we go back to the table and go back to the same part at the bottom, "Based on value of

transactions", you see an entry:
"Other three party scheme cards."
Which obviously includes Amex and for the UK will be predominantly Amex, correct?
A. Yes.
Q. We will see that in the period between 2006 and 2009 Amex increased its market share from 8% to 14%, yes?
A. Other three-party scheme cards had that effect, so I assume most of that is Amex.
Q. Okay. So we see a 6% increase over those four years?
A. Yes.
Q. That's twice the level of increase which you say would have taken place over the nine year claim period if MasterCard had operated with zero or low interchange fees while Amex applied its actual fees. I say that because I'm comparing the 2 to 3% figure which you say MasterCard would have lost and I'm just noting that for those four years, Amex actually gained 6% in any event.
A. That is right. You are talking about the 6%, but what has actually changed in those figures -- changed during that period?
Q. Well, that 6% increase in market share for Amex took place during a period when MasterCard had average interchange fees of around 0.84%. Does that sound about right to you in terms of the level, or do you want to

see the figure?
A. No, I think that's broadly right.
Q. That average interchange fee applied by MasterCard in that period is nearly six times higher than the MIT-MIF that you are suggesting MasterCard should have applied, correct?
A. Yes.
Q. Yours is 0.15 and this is 0.84.
A. Roughly six, yes.
Q. If in the period between 2006 and 2009 there had been as wide a disparity between the MasterCard MIF and the Amex fees, as you propose, Amex would have gained a much larger market share at MasterCard's expense than it actually did, would it not?
A. Controlling for what? That is not controlling for anything. If over the period, actually, you have more affluent consumers, then you may see a shift towards Amex, given the same ratio between Amex and the MasterCard MIF.
Q. We have actual figures because that's what this table suggests.
A. These are actual figures but you haven't controlled in any way in that last statement/question for other factors.
Q. Do you think that if the MasterCard MIF had been 0.15

instead of 0.84, Amex would have achieved a materially larger market share at MasterCard's expense or not?
A. The point I'm making is that once you go to a low or zero MasterCard MIF, that there would be pressure on Amex to reduce their rates and that's the mechanism that I saw in the Australian data.
Q. So that depends, again, on Australia?
A. It is something where something has changed and therefore I can observe an effect. I can't speculate.
Q. Assume you are wrong on Australia, and Amex isn't under any pressure to lower its merchant fees and doesn't do so, do you accept that, in that scenario, the differential of the sort that I have described would lead to a greater shift in market share from MasterCard to Amex?
A. Yes.
Q. Can we go to page 5 of the table. You will see in the top left:
"Merchants accepting payment by card in thousands."
You will see "Number of merchants accepting payments by MasterCard" in the first row. The figures go up from 811 to 1126, the same for Visa. Then:
"Number of merchants accepting payment by other cards."
American Express starts at 570 and goes to 1,000.

So what we see is that, whilst Amex had lower acceptance than MasterCard throughout the period, the gap actually narrowed considerably over the period of the claim; do you agree?
A. The gap did narrow, yes.
Q. Given the growth in Amex's market share between 2006 and 2009 that we saw on page 3, consumers obviously viewed the benefits from Amex, such as higher rewards, as compensating for its lower levels of acceptance; do you agree?
A. Merchants felt cardholders benefited, merchants felt that they -- that there was more acceptance by cardholders and thought that more of these desirable affluent people would come into their stores.
Q. Can we go to C2, tab 2. I need to keep the table, so you probably want to keep that tab. C2, tab 2. If we go to page 23. You should look at the first page, this is the witness statement of Mr Douglas.
A. Yes.
Q. That's something you have read, isn't it?
A. I have read Mr Douglas.
Q. If we go to page 32. I think the easiest way is if you just refresh your memory by reading to yourself paragraphs 42 to 46, please. (Pause)
The particular passage -- I wanted to give you the

context, but in 44 you will see that Mr Douglas explains, four lines into 44:
"We could not compete with Amex for these issuers based on the standard default interchange fee. As such, we developed and offered our issuing customers an opportunity to issue MasterCard's World credit card as an alternative to Amex. This was a premium product created to compete with Amex in the niche travel and entertainment space in 2005 to 2006. It required a specific level of cardholder rewards and had a higher default interchange rate to cover this. The World card offered a 50 plus BPS premium over standard default domestic rates, resulting in a default interchange rate of between 138 and 150 BPS."
I would like you to see the development in relation to World by looking at C2, tab 7. It is the same one as Mr Douglas's statement.
A. Sorry.
Q. That's fine, tab 7. That should be the witness statement of Mr Willeart?
A. Yes.
Q. Again, is this something you have read?
A. Yes.
Q. If we could go to page 128, paragraphs 48 to 49, you will see the last sentence of 48:

"I was also involved in the development of MasterCard product to compete with Amex in the co-brand space. As regards the former, I was aware that MasterCard had developed a premium credit card, the World card in 2005, which had a higher premium fallback interchange rate that was competitive for those offered by Amex credit cards."
That's what Mr Douglas described, the creation of the niche World card in his statement. Mr Willeart goes on to explain:
"This product was subsequently adapted and used by MasterCard in 2009/2010 to respond to the competitive threat that Amex posed more generally in relation to MasterCard's major issuers, who were seeking to target affluent cardholders. MasterCard was on the verge of losing a number of those issuers who were intending to move their entire credit card portfolios to Amex's non-proprietary card."
So what we see from this, tell me if you agree or not, is that MasterCard prevented Amex taking further market share by developing and offering to issuers in 2009/2010, a premium card called MasterCard World, which had interchange fees which were roughly 0.5% higher than MasterCard's standard interchange fees; do you agree? Do you want me to repeat the question or statement I'm

asking you to agree with?
A. Do not repeat your question, I will say yes. There is a context, I think, to some of this. But I want you to ask questions rather than me speak.
Q. Can I go back to the table that we are looking at in bundle B, tab 11. You can put away the C bundle now. Do you want to take some time to do so?
A. It is going to create a mountain.
Q. That's what I'm worried about. You are getting overwhelmed. You need B out at the moment. So we are back in the table at page 3. If we pick up the story of Amex's share of the market, so it is the bottom row in the table. We have looked at the increase from 2006 to 2009, from 8% to 14%.
What we see is that from 2010 onwards, which coincides with the evidence we have just seen of MasterCard repositioning its World card as a general premium product, what we see is Amex's market share declined, correct?
A. Well, first off, I think we need to explain a bit more for the panel 2008 onwards, because of that 8%, at that point, it is the Amex proprietary scheme. If we go to 2007, it is 10%, is proprietary scheme. 13% is the proprietary scheme. 14 is when we have -- and this is why I need to go back to the previous one, when Lloyds

GNS came in, that is the four-party equivalent of Amex, okay?
So if you are going to have competition from other issuers saying, look, we need to have a four-party Amex or -- we are going to move to a, four-party Amex because we have a MasterCard card and you don't offer enough standard, you would expect that to be around. So the Amex proposition has gone down, 13 to 11, with the threat of a new MasterCard World card. Okay?
Q. If you look at footnote 13, it explains:
"In addition to three-party scheme cards, these cards include the American Express cards issued under the GNS initiative, which allows financial institutions such as banks to issue American Express cards."
We have seen from the evidence that it is precisely because of the GNS threat that MasterCard took the step of broadening out its World card. So what we see, do we not, is that with the introduction of the world card, the effect, even with the launch of GNS, was a reduction in Amex's market share, correct or not?
A. I think that needs further clarification because you need to bear in mind that what I'm saying to you is, of that 13%, the GNS accounts for some 2.73. So if we are saying that the World card has competition with GNS and that is your major substitution, then the reduction

is -- and basically that's Lloyds at that point, which wasn't working very well -- then that's the -- possibly the drop from 13 to 11. I hope that helps you.
Q. I think we are agreeing, because my question is not a particularly difficult one. Amex's market share dropped after the introduction of the World card, just as a fact. Let's forget for a moment the whys and wherefores, that is observable from this, isn't it?
A. We don't know part of it. The point here I'm making is that the part which is competing between the -- is the GNS and your new MasterCard World card. It is not the proprietary three-party scheme.
Q. Footnote 12 tells us that the figures in this table include both three party Amex cards, the proprietary cards and Amex GNS cards, correct?
A. That is right, Mr Hoskins. I'm not going to argue on that point. I'm merely making a factual point that the GNS card, the Lloyds card, did not come in in 2006. It came in -- and correct me if I'm wrong -- on -- I'm going back to Mr Douglas' -- I think it came in in 2008, not to hold up the Tribunal.
Q. But the question I'm asking is a really simple one which is the total number of Amex cards in the market decreased after 2009, correct?
A. The value decreased after 2009, the total number of

cards increased. You can see that from number 1, which is the number, and the value is the second bit at the bottom, which you are referring me to.
Q. Yes, in a growing market, Amex's share by value of transactions decreased after 2009?
MR JUSTICE BARLING: Sorry, you are saying the number of cards increased for Amex but the value of the transactions decreased after 2008?
A. And that is right.
MR JUSTICE BARLING: Is that what these show. I'm sorry, I haven't followed it through. I don't know where you get the number of cards for Amex.
A. If you look at the next row up. So it is number 1. It says:
"Based on number of cards issued."
MR JUSTICE BARLING: Sorry, I'm with you now. Thank you.
MR HOSKINS: If MasterCard had not been able to respond to the competitive threat posed by Amex in 2009, by offering a premium card with higher MIFs -- are you with me so far -- then Amex's market share would have continued to increase after 2009, in the same way it did from 2006 to 2009, wouldn't it?
A. The people who are holding Amex third party card without a fee -- with a fee, are not the same people, if you think of competition, who are going to go for that

MasterCard offering in 2008.
What we are talking about is the competition that is the fee paying, competition of the GNS and the Amex -- the Amex GNS and then the MasterCard card.
Q. Do you accept that the development of the MasterCard World card into a general offering in 2009/2010 had an impact on Amex's market share after its introduction?
A. In terms of value, yes. In terms of volume, it doesn't say that, it is stable.
Q. If, rather than introducing its World card with a level of MIF, which could compete with Amex, MasterCard had instead cut its existing MIF to a sixth of its existing level, so not increasing it, but cutting the existing MIF by a sixth, the loss of market share to Amex would have turned into a flood, wouldn't it?
A. There is a tiny bit of a problem, we don't have 2015 data.
Q. Let's concentrate on the data we have.
A. Well, if you --
Q. Imagine, in my scenario what would have happened between 2010 and 2014, if the real world data, which is the introduction on a general basis of the MasterCard World card with a MIF which could compete with the Amex offering, and we are imagining, in your counterfactual that rather than being able to do that, MasterCard could

only offer a card with a sixth of its existing MIF, ie 0.15%. So rather than being able to compete with Amex by putting a higher MIF, it had to reduce its existing MIF which wasn't competing with Amex by a sixth. What would the effect have been on Amex's market share?
A. The problem here is we are speculating.
Q. Of course we are, it is a counterfactual. That's why we are here, I'm sorry.
A. No, counterfactuals should really have some realistic basis, you should have a change.
If we open the curtain on this beautiful day we notice that at point 3 the MasterCard MIF has come down from 0.81. We do not observe necessarily everyone rushing to get their Amex GNS at 0.69. So there has been a change in the market outside and yet we are not observing --
Q. This is prior to the regulation, I'm looking at the period prior to the regulation.
A. If you --
Q. I'm asking you to imagine a counterfactual because that's what the Tribunal has to do to decide the case?
A. So prior to the regulation, would we be looking at Amex being regulated at all?
Q. No.
A. Okay. So if we do that, then I think we then go back to

the Australian evidence.
Q. If you are wrong about Australia, and Amex is able to and does maintain its actual merchant fee levels that applied during this period, but MasterCard has to cut its MIFs by a sixth of what it applied between the years 2010 and 2014, there would have been a flood of issuers switching to Amex from MasterCard, correct or not?
A. First off, there would be -- if I'm wrong about the Australian evidence, that there is no merchant pressure leading to the Amex discount rate falling, then for -- issuers would have a choice whether they moved to issue Amex GNS cards. Whether they are going to do that for more than the premium segment, I would say not; that's my submission.
In other words, it doesn't wipe out MasterCard. It may mean that they have to retrench, which is in the words, I think, of Mr Tittarelli, in some form.
Q. So you accept that in the counterfactual I have described there would be significant switching from MasterCard to Amex?
A. In the counterfactual you describe, yes, of some form.
Q. Let's go to Australia. Bundle D2, tab 2. This is, again, your first report at page 161, paragraph 181:
"In Australia the RBA capped the MasterCard and Visa credit card weighted average interchange fees which fell

from about 0.95% to 0.55% on 1st November 2003, and then to a maximum of 0.5% from 1st November 2006."
So the Australian regulation applied on its introduction to both MasterCard and Visa, correct?
A. MasterCard and Visa credit cards, yes.
Q. Yes. The Australian experience doesn't tell us anything material, does it, about what would have happened in the UK if the MasterCard MIF had been materially lower than the Visa MIF?
A. The effect was applied to both.
Q. So it follows that the Australian experience can't tell us anything useful about what would have happened in a counterfactual where the MasterCard MIF had been low or zero and the Visa MIF had been maintained at its actual level; Australia can't help us with that, can it?
A. Agree. Sorry, I said yes.
Q. Sorry, I did not pick up your answer. Can we go to E3.14. You want to keep bundle D2 out. E3.14, tab 265. It is right at the front of --
A. Sorry.
Q. -- the bundle. It should be an article by Jean Tirole.
A. That is right.
Q. If you go through to page 5694 of this article. At the second paragraph on 5694:
"In reaction to downward pressure on interchange

fees, cardholders and issuers who benefit from higher interchange fees, so long as merchants keep accepting the card, have an incentive to migrate toward card payment schemes that put more of the burden on the merchant.
"A case in point is Australia, where, in the wake of the mandated decrease in the interchange fee, three of the top four Australian banks signed up agreements to issue American Express or Diners Club cards."
Were you aware of that before you read this article?
A. Yes.
Q. But you did not mention it in your reports.
A. Sorry, I think we did.
Q. You mentioned in your reports that three of the top four Australian banks signed up to agreements to issue American Express or Diners Club's cards?
A. In 2004 and then in 2009, two episodes.
Q. Can we go back to D2/2. You can put away E3.14 for the moment. Again, it is your first report at page 69 please. At paragraphs 69 to 70 --
A. Sorry, Mr Hoskins for that last answer, can I just refer you to paragraph 192, which is on page 164 of my first report, just to clarify, for the reference. Now 64.
Q. Back into -- yes, so we are in that report and it is page 69. Paragraph 69, you say:

"The reason why the Amex gain was so small in Australia, and would have been similarly small in the UK in a low interchange fee environment, is that Amex was unable to obtain its relatively ..."
That should be "relatively high MSCs". Is that correct, the word "high" is missing?
A. Yes, sir.
Q. What happened was the Amex MSC fell in line with the fallen four-party Visa and MasterCard MSCs:
"With lower income from merchants, this meant that Amex was not able to maintain their attractiveness of their rewards. As a result, it did not gain any competitive advantage over Visa and MasterCard following the reduction in the interchange fees. Although it was not directly affected by the regulation it nonetheless experienced a similar and in fact larger fall in its MSCs.
"What ultimately drove this process was the willingness of merchants to fund rewards programmes via higher MSC payments and they would only be prepared to do this if there was compelling evidence that Amex cards could offer a significant level of incremental spend. In Australia a large number of merchants responded by starting to surcharge, meaning if a cardholder wanted to accumulate rewards points they would have to fund them

themselves. The increase in surcharging undermines the Amex business model and provides a strong incentive for Amex to reduce its MSCs."
That's what you have been bursting to tell the Tribunal for most of your evidence, isn't it? That is the point you have been making?
A. I think the point is actually not just 70, but actually going back to the data and looking at the impact of Amex in Australia, both in terms of its share and here in 70 in terms of how the price -- the discount rate in Australia for Amex fell.
Q. Can we go to page 199 of your report. 367 you say:
"What we have seen in Australia is merchants react by making increased use of surcharging."
Again, it is your point about merchants don't want to pay higher Amex fees so they react and put pressure on by surcharging; is that a fair summary of your evidence in these paragraphs?
A. Yes.
Q. If you go to E3.13, at tab 249, you should have a MasterCard Worldwide document entitled:
"UK alternative premium model."
A. Yes, a confidential one.
Q. It is okay, I am going on show you something that's --
A. We will make sure we can deal with it, yes?

Q. If you feel uncomfortable you can't give an answer, you shout.
At 5334, you should have a slide that begins "Surcharging has risen rapidly since 2006"; do you have that?
A. I do.
Q. You will see top right, above the MasterCard symbol, Australia. So this is relating to Australia, yes?
A. Yes.
Q. This shows what you explained in your evidence, that there was a rapid increase in surcharging in Australia after the introduction of their regulation, correct?
A. The regulation starts in 2006, in terms of debit cards, and 2003, yes.
Q. But this confirms your evidence, that's what you are talking about, isn't it?
A. It confirms that we have an increase in surcharging, yes.
Q. If you put that away, can we go to bundle 5.4?
A. Let me just say, this slide actually says "at least one credit card". It is not clear what this actually means, does it actually mean Amex only or is it MasterCard? I just wanted to clarify that. I don't know.
Q. I was showing this to confirm your own evidence which was that surcharging increased (inaudible) in Australia

after the introduction of the regulation?
A. I know but this terms of surcharging, there is the fact of surcharging and then it is how surcharging actually takes place. That was --
Q. Can we go to 5.4, at tab 56. This is the Commission's impact assessment for the regulation; do you have that?
A. I do sir.
Q. Can we go through to page 1593, you will see there is a heading in the middle of the page:
"2.6, option 16: exemption of commercial cards and three-party schemes."
The third paragraph down:
"Based on the experience in other constituencies, in particular Australia, we do not expect either commercial cards or three-party schemes could take over the debit and credit card markets in this situation by offering more advantages to customers."
Then there is a discussion of the Australian situation. It is the next paragraph I want to look at:
"Due to downward pressure on Visa and MasterCard IFs through caps and increased transparency measures, a ban on the no surcharge rule, removing the HACR between debit and credit cards, both the MSCs on Visa MSC and three-party schemes decreased. Though surcharging was slow to develop among merchants, by the end of 2010

almost 30% of merchants imposed surcharging on credit card products. The average surcharge on American Express was 2.9% and for Diners Club 4%, these surcharges being higher than the MSCs, 1 percentage point for Amex and 1.8 for Diners Club. The RBA has received evidence that consumers respond to surcharges by avoiding the use of more expensive cards where possible."
So what we see in Australia, not only was there an increase in surcharging, but the average surcharge in relation to American Express was actually larger than its fees, correct?
A. Yes.
Q. If we can go back to -- you can put this way away, 5.4 away. Go back to your first report, D2, tab 2. Go to page 224. You will see the heading at the bottom of the page:
"Has surcharging been a realistic option for merchants and, if so, has this led indirectly to downward pressure on interchange fees?"
This is in the context not of Australia but of the UK, correct, this part of your report?
A. Yes.
Q. You make a point about how surcharging would exert a significant constraint but on 551, over the page, you

say:
"However, in practice many merchants are reluctant to surcharge for fear of losing ...(Reading to the words)... David Brooks witness statement. We do not surcharge our customers for card payments because our competitors do not. If we did, we would clearly risk losing our customer's business to others who do not surcharge."
Then 5.12:
"Additionally, the British Retail Consortium, BRC, noted that the majority of members do not levy surcharges. In addition to the competitive constraints, the BRC noted that there are practical ...(Reading to the words)... this would present a competitive advantage to another. Complex hardware, software and staff training would be required to implement an accurate surcharging mechanism and process this point of sale."
Mr Brooks' evidence on this is at C1, tab 3. If we look at paragraph 32 on page 41 --
A. Could you give me that reference again.
Q. Tab 3 of C1, page 41, paragraph 32:
"We do not surcharge our customers for card payments because our competitors do not. If we did we would clearly risk losing our customers' business to others who do not surcharge. Most retailers do not surcharge

...(Reading to the words)... should be banned on all cards. I agreed with the BRC position and this is basically what I understand the regulations provide."
So according to Mr Brooks' evidence, surcharging is neither desirable nor feasible in the UK; do you agree?
A. Correct me if I'm wrong, but I think I bought a Ryanair ticket, where there is surcharging in the UK? Certainly in the past; I haven't done it recently, I promise.
MR JUSTICE BARLING: You weren't asked about -- you were asked whether you agreed it was undesirable.
A. At the moment, in the current situation, what Mr Brooks says is a fact.
MR HOSKINS: Can we go to E1, tab 3. You will see this is the OFT decision in relation to MasterCard that was subsequently annulled.
A. Yes.
Q. If we go to page 132 --
A. Yes. Is it page 132 not the --
Q. Page 132 of the bundle.
A. I have got it.
Q. Paragraph 281:
"Lastly, the OFT considers that the relative rarity of surcharging by merchants in the UK is itself evidence that it is unlikely it would be a viable option for many merchants."

Do you agree with that view of the OFT?
A. At that time it would have been, yes.
Q. So what we see from all this evidence, which is specific to the UK, is that, whilst in Australia Amex reduced its MSCs because merchants began to impose surcharges on the use of its cards, surcharging is not a feasible option in the UK; do you agree?
A. Given the Visa and MasterCard situation at the time, it was not seen as a feasible option. That's what it says.
Q. If surcharging was not a feasible option in the UK, the Australian experience is not relevant to the UK, is it?
A. If in the counterfactual things change then the Australian experience is something to think about, about how the market may change. The OFT paragraph here is in the context of that situation which, in effect, we are saying is the actual.
Q. Without any feasible prospect of surcharging, it is likely, is it not, that Amex would have maintained its merchant fees at a high level in the UK if MasterCard had had a MIF at a zero or low level?
A. You are mentioning Amex?
Q. Absolutely. I'm saying if, absent surcharging, then Amex would have maintained its merchant fee at a high level, if MasterCard had a zero or low MIF?
A. Absent surcharging or non-acceptance of the Amex card.

Q. You agree with --
A. That is -- I'm just defining it properly.
Q. It is obvious why it would have done that because it would have had a significant competitive advantage over MasterCard, wouldn't it?
A. The competitive advantage of Amex is for the affluent. Not all merchants accept it. So to the extent that merchants do accept, that is the case.
Q. Can we go back to E3.14. This time go to tab 270. (Pause)
You will see that this is a Reserve Bank of Australia document. Sorry, are you there? It is 270.
A. I am, sir.
Q. Reserve Bank of Australia, review of card payment regulations issues paper for March 2015, yes?
A. Yes.
Q. Then if you can go through to page 6297, you see the heading "Interchange fees". RBA states:
"The standards on interchange fees for MasterCard and Visa systems set benchmarks for the average interchange fee ..."
The average interchange fee:
"... that could be paid in those systems, the standards require that every three years or at the time of any other ...(Reading to the words)... of the most recent financial year. For credit cards the number of categories of interchange fees has risen from three to 19 for the MasterCard system and from five to 23 for the Visa system since November 2003.
"Furthermore, there has been a significant widening in the range of interchange rates. For the MasterCard system this range was widened from 63 basis points in 2003 ...(Reading to the words)... 48 basis points to 180 basis points."
We see that in Australia the regulation provided for a weighted average interchange fee for MasterCard and Visa; that is correct, isn't it?
A. That is correct.
Q. MasterCard and Visa were entitled to apply different MIFs to different types of credit card, correct?
A. That is correct.
Q. When we look at graph 9 in this document, "Credit card interchange fees, range of interchange fees", you will see on the left the spread for MasterCard, we see that MasterCard did in fact apply a widespread of MIF rates, correct?
A. It did, yes.
Q. If we can go now to bundle E3. It is a document we have seen already, MasterCard Worldwide UK alternative premium model, yes? 2nd November 2012.

A. Which tab?
Q. I'm so sorry, I'm ahead of myself, tab 249.
A. This is the confidential document.
Q. Thank you, you are right. Keep reminding me. The bit I'm going to show you is not confidential.
A. We will try our best.
Q. No, I'm very grateful. If you can go through to 5328. If you just bear with me for one second. (Pause)
I'm told that we are safe to refer to this page:
"In Australia surcharging and reduced Amex economics limited shift in scheme shares. Regulations introduced in 2003 caused interchange to drop by 45 basis points ... led to significant restructuring of credit card value propositions to compensate ...(Reading to the words)... issued Duo products."
Which is the point we saw before:
"... led to a significant but increase in Amex share from ...(Reading to the words)... VISA, albeit slower."
That was the surcharging effect that we looked at a few minutes ago:
"Merchants forced Amex to come down by surcharging."
Yes?
A. Yes.
Q. Then:
"... and because MasterCard/Visa extensively used

premium interchange rates."
So what we see, do we not, is that, due to its ability to apply higher MIFs for premium credit cards, MasterCard was able to limit the damage that Amex could do to it in the Australian market? It used its ability to apply a range of rates to apply high rates to premium cards to limit the damage from Amex, correct?
A. The graph, graph 9, so we do see the differential widens. There were obviously some transactions at the 2, towards the Amex level, and other ones have to be correspondingly lower. So the argument is that Amex -- there is a sufficient number being able to be charged at 2 to limit Amex's behaviour. Now, that's pretty hard as an explanation to understand why Amex then reduced its discount rate.
Q. We know why because of surcharging, we have been through all that.
A. But what we call anti-circumvention maybe. I don't want to use that term too loosely, but if that was the case, I would also expect that Amex rates would have raised in response, and they didn't, if that is the explanation. So I do not agree with you, sir.
Q. We see there was a range, we see there was a high range and we see from a MasterCard internal document that MasterCard and VISA extensively used premium interchange

rates to compete with Amex. Are you saying that MasterCard and Visa did not extensively use premium interchange rates to compete with Amex?
A. What we don't know --
Q. Sorry, do you --
A. They obviously did do --
Q. Thank you.
A. What we don't know is how much.
Q. Under your proposed counterfactual, in the UK, of zero or low MIFs, MasterCard would of course have had no ability to apply higher MIFs for premium credit cards in the UK, would it, because your MIF is 0.15?
A. It's 0.15, yes.
Q. If an issuer sought to charge by way of an annual fee or a per transaction charge for a non-premium card, we're talking about charging the cardholder, for a non-premium card, what would happen? So if an issuer sought to charge for a non-premium card what would happen?
A. Demand for the card should go down.
Q. So the number of transactions using that credit card would fall, yes?
A. Yes.
Q. The number of consumers holding that credit card would fall, yes?
A. Yes.

Q. If the issuer maintained that position for a reasonable period of time, say a year, the following cardholders would be material, yes? It is not de minimis, the effect.
A. It is not de minimis.
Q. If the number of cardholders fell, merchants would be less willing to pay an MSC to accept those cards, correct?
A. Than otherwise would be the case, yes.
Q. If we go back to D2, tab 2.
A. The first expert report.
Q. That is correct, yes. At page 207, paragraph 419, you say:
"Both the prohibition on ex post pricing and the abolition of the HACR would involve bilateral negotiations between issuers and acquirers. These could potentially be costly and would yield little, if any, gain for issuers."
Why would they be costly?
A. In terms of the transaction costs of actually negotiating.
Q. Why would they yield little, if any, gain for issuers?
A. In terms of the ex post pricing that could be -- the outcome of the negotiation, remember we are not in the default MIF, we are in negotiation between the acquirers

and issuers. I think your point -- the ex post pricing may be zero and I'm saying it could be up to the level of transaction benefits. How do you measure those? It is roughly 0.15, is what I'm saying.
Q. If the MasterCard system was subject to a prohibition on ex post pricing but the Visa scheme were not, what would happen?
A. I explained my counterfactual, in response to the Visa staying up and the ex post pricing being applied to MasterCard yesterday.
Q. Issuers would migrate to the Visa scheme, is the answer, isn't it?
A. It depends whether that is a temporary or a permanent move.
Q. Assume it applies over the period of the claim?
A. Then your supposition is correct.
Q. Then, going to page 220 --
MR SMITH: Sorry, Mr von Hinten Reed, just staying on paragraph 419, again. When you say that there's potentially little gain for issuers negotiating bilaterals, is that a conclusion that you reach because of your assumption that there is a prohibition on ex post pricing?
A. Yes. In other words, you have -- we are in a world of bilaterals, so forget about the default MIF for one

minute. We have a honour all cards rule and to stop the collapse, which in my submission, obviously not in Dr Niels', but in my submission that would result, you impose an ex post pricing rule. All I'm saying to you then is: what's the value? There would still be negotiations, what is the value you could eke out from those negotiations?
I think from the merchant's perspective, because they are now in negotiation, they would say up to the level of transaction benefits I'm willing to negotiate. So that is the 0 to that value. I'm just simply giving a value based upon how we calculate transaction benefits. So it could be zero or it could be 0.15. That's the sort of negotiation space you have got and it all depends how difficult those negotiations are. If it is quite easy because you have the protocols, then the transaction costs of the negotiation are low, if not they could be high. I don't know, sir, on that.
MR SMITH: On the assumptions in paragraph 419, absent a bilateral agreement, the issuer's interchange fee is zero; is that right?
A. You need some sort of acceptance. If you have the HACR and I'm not assuming that the --
MR SMITH: Assume the HACR is in place, assume also that there is a rule, as you say here, prohibiting ex post

pricing.
A. It doesn't necessarily have to be zero.
MR SMITH: But the only way you move from zero is by bilateral agreement?
A. Exactly. That's where the negotiation comes in.
MR SMITH: So I don't quite understand why you are saying that there is little gain for issuers because the whole reason for an issuer entering into a bilateral negotiation would be to shift the interchange up.
A. Yes, to get some of that 0.15 over to their cardholders. So the question is, if the costs of negotiation are large, then you eat into that money that you are shifting from the merchant over to the other side.
MR SMITH: Right, so the reason you are saying, in paragraph 419, that it would yield little is because of your opinion that the range for negotiation of the interchange fee is up to 0.15?
A. It could, yes.
MR SMITH: But no --
A. I don't know where we lie on that continuum, okay? Whether it is 0, 0.5 -- up to 0.15, I don't know.
MR SMITH: But what you are saying, I think, is that the 0.15 represents the maximum.
A. Yes, sir.
MR SMITH: In other words, the room for negotiation between

issuer and acquirer is between 0 interchange and 0.15?
A. Exactly, and in the alternative world where you are not thinking about the default MIF, you are thinking about -- you then have a negotiation. If you have the HACR, you have the ex post pricing rule, then that's the range of negotiation value.
MR SMITH: Just to be absolutely clear, your 0.15 derives from the MIT-MIF.
A. Yes, but I'm deriving the -- I'm using the methodology to derive the value of transaction benefits. I'm not saying it is because it is -- don't confuse it with the default MIF.
MR SMITH: No, no.
A. It is simply a methodology.
MR SMITH: I understand, we are talking about bilateral negotiations but I wanted to understand where your ceiling came interest.
A. And that is where I take it.
MR SMITH: The savings, thank you.
MR HOSKINS: Sir, it is probably a good time. I could do with lunch.
MR JUSTICE BARLING: Yes, I am sure you could. I am sure Mr von Hinten Reed could as well.
Mr von Hinten Reed, remember you don't talk to anyone about the case over the lunch break.

A. Even my wife.
MR JUSTICE BARLING: Anyone. Thank you.
(1.00 pm)
(The short adjournment)
(2.00 pm)
MR HOSKINS: Good afternoon.
MR JUSTICE BARLING: Okay?
MR HOSKINS: Yes. Our old favourite D2, tab 2. This time at page 207. Just before lunch we saw paragraph 419. This time 420, you say:
"As noted in section 6.3.1, the evidence suggests that issuers are likely to remain financially viable in the absence of the MasterCard UK MIF. Therefore, instead of incurring the costs of bilateral negotiations for potentially little gain, issuers might be willing to accept "at par" clearing, that is, issuers process the transaction without deducting an interchange fee."
I just want to clarify that would be equivalent to a zero MIF, wouldn't it?
A. Yes.
Q. Then, if you can go to D3, tab 3, which is Dr Niels' first report. Then go to page 258, paragraph 3.59. He says:
"In the absence of a default UK MIF and any hypothetical explicitly or implicitly requiring the

interchange fee to be zero, all transaction settlements between an acquirer and a issuer within the scheme would require a bilateral agreement between the two banks in their terms of dealing, including in relation to interchange. In such a situation, the relevant factor in the bilateral negotiation is that the acquirer effectively has no choice but to settle a payment with the issuer in question, since this transaction was made by one of that issuer's cardholders. In economic theory this has been described as the hold up, hold out or ...(Reading to the words)... Economic models commonly find that a situation with a series of bilateral interchange fees and no default MIF tend to result in higher interchange fees overall than one with a default MIF."

Then you deal with that issue -- this is in your second report, so it is D2.1, tab 3, page 455. You refer to the passages we have just looked at, as I understand it, you agree with the existence of this economic theory, the hold up or hold out or Cournot theory; is that correct?

A. I agree with the hold out theory.

Q. Then at 185, you say:

"Under bilateral negotiations under the honour all cards rule, HACR, interchange fees would be pushed so

high that the scheme would collapse."

I think what that means is that in the situation contemplated there, ie bilateral negotiations under the HACR, what you are saying one would find is that MIFs would have been driven higher than the actual level during the period of the claim, is that correct, in the first instance?

A. In the first instance there is nothing to stop the MIFs under a HACR rising and rising.

Q. Then, ultimately, you say the scheme would collapse under this system?

A. That is right.

Q. You will be glad to hear we can move on to a new topic, which is the exemptable level of the MIF.

A. Can I just make a small -- the economic theory cited -- I think it is the Small and Wright paper -- try not to read it before bed, it is very technical -- but it basically sums up that there would be a collapse in this sort of situation. So that the words "implosion" or "collapse" arise in that literature, that's where I get this from.

MR JUSTICE BARLING: Thank you.

PROFESSOR JOHN BEATH: I think it is referenced in Dr Niels' report anyway as a footnote to the paragraph we have just been looking at.

MR HOSKINS: As we know, in relation to the exemptable level of the MIF, you have suggested that the merchant indifference test is the most appropriate way to calculate the acceptable level of the UK domestic MIF during the period of the claim, yes?

A. Yes.

Q. Can we go to E3.10, tab 202.

A. I don't seem to have that.

Q. Which: the tab or the bundle?

A. No, the bundle is E3.10. I don't have --

Q. Then tab 202.

A. I don't have 202, sorry.

Q. If someone can help find a copy, it is the Commission's 2015 survey on merchants cost of processing.

A. It is not there.

MR JUSTICE BARLING: I think it was added to ours.

PROFESSOR JOHN BEATH: Yes.

MR HOSKINS: So the Tribunal has the document?

MR JUSTICE BARLING: We have it because I think it was referred to in submissions.

MR HOSKINS: Let me hand up an extra copy.

You see this is the Commission's survey which you have probably read a few times, I imagine?

A. Yes.

Q. Can we pick it up at page 4295. Paragraph 6, the

Commission says:

"The determination of the nature of costs, in particular the actual split between fixed costs and variable costs, is crucial for the definition of the cost functions of payment instruments and the implementation of the MIT."

Do you agree with that?

A. Yes.

Q. Then it goes on to say:

"The total cost function of a payment instrument is typically defined as the sum of fixed costs, ie costs which do not vary with the number and value of payments with the payment instrument and variable costs."

Do you agree with that?

A. As a definition, yes.

Q. If we go to paragraph 7, the Commission says:

"The definition of fixed costs ...(Reading to the words)... costs become variable."

Again, do you agree with that?

A. Yes, although I think it is more helpful for the panel, in my report I have described these things as "avoidable costs". So, in other words, when you change from cash to card it is the costs that you don't need to incur, so that -- it is perhaps more helpful.

Q. What sort of costs might vary or be avoidable over

a longer period, give me some examples?
A. If you think of the movement from cash to cards, it may be that the costs of transporting the cash to the bank may change. If the increment is sufficient. So if it is one transaction, it won't make an awful lot of difference, and if it is 10% of transactions that may change somewhat. It depends upon the circumstance.
Q. So cost of transporting cash, cost of security, having cash on the premises?
A. That could be. I have done -- in my annex B I have actually set out a very extensive classification, so if you would like to go to that, I would be happy to do that but --
Q. I just want some examples of --
A. So --
Q. -- the sorts of things that might vary over time, over a longer period.
A. For example, in a store, if you go to Sainsbury's round the corner you will see the tills, and the tills are self service -- some are self service and some are manned and that's changed over time.
The wages that are paid by -- to people on the shop floor and the amount of labour you need to not transport but handle cash in the back office may change as well. That sort of thing.

Q. Again, at paragraph 7 the Commission goes on:
"The different sets of results obtained through the present study correspond to either short-term, medium-term, three to four years, or long-term definition of fixed and variable costs."
In your report you have adopted a medium-term approach, correct?
A. I did but I think there is a basic problem with this sentence because Deloittes -- remember this is a one-year survey. So you can't really think of long term in terms of one year. If you are going to do a long-term approach you need to have more than one year, indeed many more than one year.
Q. The same would apply to medium term then, three to four years, that is more than one year.
A. You can assess it in terms of medium term, in terms of thinking about things that have changed over that period of time, but it depends upon the sort of analysis you are trying to actually do.
Q. What Deloittes did was ask the merchants to categorise costs according to particular timescales, so the fact that this was a survey for one year doesn't matter because, as we will see, what they were doing was asking merchants to classify costs as essentially fixed or variable over a certain period of time. They were asked

to assess, weren't they?
A. They were asked to assess and basically, in terms of that question, that is really scenario 2 when you think about how things have changed over a period of time. If in terms of long-term analysis, which is the econometric approach, that is based on one year and you are supposed to assume that that is long-term. That for me is not correct.
Q. In your report, just to clarify, because I don't think you have answered a question yet, you have adopted a medium-term approach?
A. Yes, sir, which, by the way for them -- I know we are going to use these terms quite often, so we may as well.
The short term is scenario 1, that was one transaction. The medium term was a 10% increment or decrease in the use of cash to cards. That was measured over three to four years. Then the long term is the econometric approach. Is that helpful, sir?
Q. I mean, that's what the Commission did, yes.
A. Yes.
Q. Again, this is a fairly obvious question, I hope, but a MIT-MIF, which is calculated on the medium-term approach will necessarily not take account of costs which would vary over a longer period; do you agree?
A. Yes, it would be deemed to be fixed.

Q. A MIT-MIF calculated on a medium-term approach will necessarily not fully reflect the total costs and benefit to the users or to society more generally of a given payment system; do you agree?
A. Let me explain the medium-term approach, in terms of the costs of cash in payments for the merchant. In terms of social welfare, you are not thinking in terms of a producer on the other side. So what we are talking about are the merchants. So the answer to your question is yes.
Q. Can we go to E3.14, at tab 266. You should have an article called the "Economics of payment cards", by Rysman and Wright?
A. Yes.
Q. If we can go to page 5736. You will see there the last paragraph on page 5736 begins "Another important practical concern"; do you have that?
5736, and it is the last paragraph on that page, it begins "Another important practical concern".
A. Mmm hmm.
Q. If you go down six lines, you will see they say:
"The concept of a merchant indifference test is based on a theory that ...(Reading to the words)... cards or cash and that the extra costs of one or more transaction is constant, it therefore focuses on

marginal costs, ie the additional costs to the merchant if a cardholder uses cash rather than card for a single transaction."
Do you agree with that statement?
A. The theory that's referred to here is, I think, the Rochet and Tirole paper, in terms of the Tourist Test on one transaction. If you go to the medium-term approach, or think of it in terms of avoidable cost, you are actually thinking in terms of some of those costs of payments actually changing over time as the amount of cash reduces and the amount of cards increases. So it is not quite true.
Q. Do you agree with the statement that the concept of a merchant indifference test is based on a theory which assumes no fixed costs to merchants of accepting cards or cash? I appreciate the definition of "fixed costs" can vary over time, we have established that?
A. Okay.
Q. But once you have adopted your timeframe and established their fixed costs, the MIT doesn't take account of them, does it?
A. There are some fixed costs, yes.
Q. Which are not taken account of?
A. Which are not taken account of, no.
Q. Then the authors go on to say:

"However, in reality, there are some lumpy costs. For example, the costs saving of eliminating ...(Reading to the words)... These types of costs should presumably still be averaged per transaction and included since they ensure the regulated interchange fee provides the right long-run incentives."
Do you agree with that?
A. Yes, that's why I preferred the scenario 2, over three to four years over the one transaction. I think we are agreed on that across the parties.
Q. But, insofar as there are costs which may vary over a longer term, ie more than three to four years, do you accept that your MIT calculation underestimates a MIF on that basis?
A. The calculation -- the central calculation does but I have also done a sensitivity test implying basically everything moves to variable by value or variable by volume.
Q. I'm going to come onto that but the MIT itself, over three to four years, by definition, I think you have already agreed, will exclude costs that vary over a longer time period than three or four years?
A. Yes.
Q. Julian Wright, who is one of the co-authors of this paper is a well respected academic in this field, isn't

he?
A. Yes.
Q. And so is Jean Tirole?
A. Yes.
Q. And so is Professor Rochet?
A. Yes.
Q. They are all recognised as having specialised knowledge in the economic analysis of MIFs, aren't they?
A. Of the regulation of MIFs, that's the literature, yes.
Q. If we look at page 5701 of this document --
A. Sorry, 5701?
Q. Yes, the first page.
A. I apologise.
Q. You see at the bottom of the page "Acknowledgements", it says:
"This research was supported by a grant from Visa."
Do you see that?
A. Yes, I do.
Q. If particular research or a paper has been supported in that way, it is good academic practice to state that expressly, isn't it?
A. Yes.
MR JUSTICE BARLING: Just to interject, I haven't got page 5701 -- I haven't got the beginning, I start at page 5703. If there's any chance at some point, no

hurry, someone could -- thank you, Mr Cook. Sorry to deprive you. (Handed)
MR HOSKINS: Do merchants want the MIF to be high or low?
A. Low.
Q. The calculation of the MIT-MIF in the Commission's 2015 survey, under the medium-term approach, was based on data supplied by merchants, wasn't it?
A. Yes.
Q. Can we go back to the survey. So that is E3.10, tab 202. At page 4294, you see at the bottom "Methodology". If I can pick it up at the top of the next page, you will see five lines down there is a sentence that begins in the middle:
"The detailed data collection ..."
Do you see that?
A. I see that, yes.
Q. "The detailed data collection requested by DG competition was therefore very resource intensive and, as such, could not be carried out with a large number of merchants. In order to maximise coverage and to ensure the best quality data, it was decided to focus the cost measurement only on large merchants in ten countries with the highest retail turnover in the EU. Eventually this represents a trade off between provision of data and sample size and representativeness. Furthermore,

the data collection did not manage to reach the target number of replies. Several merchants mentioned resource implications and confidentiality concerns to justify their refusal to participate.

"Ensuring the representativeness of the sample is another difficult task. DG competition requested a random selection of merchants from the consultant. However, given that participation in this survey was voluntary and that the large volume of data required limited the number of participating merchants, one cannot entirely rule out potential self-selection bias."

So we see from this that the onerous nature of participating in the survey led to potential problem of self-selection bias; do you agree?

A. There was a potential problem of self-selection bias, yes.

Q. Then at paragraph 6, as we have just seen, the Commission said:

"The determination of the nature of costs, in particular the actual split between fixed costs and variable costs, is crucial for the definition of the cost functions of payment instruments and the implementation of the MIT."

If costs are classified as fixed rather than variable, that is likely to lead to a lower MIF,

correct?

A. It is best to explain -- I was going to actually, when I was thinking about this this morning, I was thinking in terms of a diagram for the panel. So, everything else being equal, if you have a higher variable costs of cards or higher variable costs of cash -- let's think of cash, higher variable costs of cash, that would lead to a higher MIF.

Q. But is it right: if costs are classified as fixed rather than variable that would lead to a lower MIF? You are excluding costs to the MIT and so it leads to a lower MIF?

A. That is right.

Q. Can we go to your second report, so that is D2.1, tab 3. Page 521. This is your second report.

A. Okay.

Q. It is paragraph 472 on page 521.

A. Yes.

Q. You say there:

"In determining the proper classification of costs for the MIT-MIF calculation is a challenging task. It requires a different type of thinking about costs than typically done by merchants' finance departments."

Can you explain what you mean by "a different type of thinking"?

A. When we think about the classification of costs and how -- for example, in scenario 2, the move from cash to cards over a three to four-year period, trying to say to what extent the change would actually affect either the value or the volume was not something that necessarily, for example, Sainsbury's finance department would necessarily think of independently.

Q. Would they be well placed to carry out that analysis or do you think it would be beyond them?

A. It is certainly not beyond them because they manage to do one in 2010/2011. But there will -- not to be too arrogant -- be mistakes from an economic perspective.

Q. The fact you make a submission doesn't actually mean you have got the classification right; it just means you have put in a submission.

A. That may be the case.

Q. At paragraph 473, you say:

"It is the case that the cost classifications provided by merchants and their answers may include a degree of error, due to the problems described above. However, on the whole ...(Reading to the words)... of the MIT-MIF."

That assumption would not be correct if participating merchants provided answers which were designed to lead to a lower MIF, ie I'm asking you to

assume a systematic bias.

A. Well, the systematic bias could actually be either way. I will explain, probably in a minute, that it is not obvious that the finance departments, if they were thinking of trying to get a lower MIF as a strategic advantage, their finance departments might not actually achieve it, they may go the opposite way.

Q. That is not quite an answer to the question, which is: your statement that the errors would average out across merchants wouldn't be correct as an assumption if in fact participating merchants had provided answers which were designed to lead to a lower MIF, because all the biases would be down, so they couldn't cancel each other out?

A. Sorry, I misunderstood your question. If it was all in one direction, then the answer is yes.

Q. The merchants were told what the purpose of the survey was before they participated, weren't they?

A. The merchants were surveyed across Europe and they were told.

Q. Whether they acted on it or not, merchants, therefore, had an incentive to categorise costs as variable rather than fixed, didn't they?

A. If people were thinking strategically they may have done. I'm not ruling that possibility out.

Q. Can we go to E3.14, at tab 266. So we are back in the
Rysman and Wright article, yes?
A. Okay, yes.
Q. If you go to page 5737. It is the paragraph that
begins:
"First, these surveys are often conducted only with
larger retail firms."
Can you see that paragraph?
A. I do, yes.
Q. They go on to say in the third line:
"Second, asking retail managers to report costs is
unlikely to give unbiassed estimates of the cost of
different instruments."
Do you agree with them that there's that risk of
bias in this sort of survey?
A. There is that risk of bias and as an expert before this
court I have got to recognise that and try and actually
avoid that bias. The way in which I, quite frankly,
have approached this is the reason why I have asked
Sainsbury's for cost data and to do these -- annex B, is
to try to get a fix without the bias and not necessarily
have to rely on what Deloittes managed to do.
In that sense, I'm comparing -- I do not rely on
Deloittes, I use it to inform whether my estimates are
in the ballpark.

Q. So, as we know, Sainsbury's took part in the Deloittes
survey, and we also know from Mr Brooks' evidence, it is
first Brooks, paragraph 38, that Sainsbury's was aware
of the purpose of the survey, correct, or would you like
me to show you that?
A. No, let's not waste time. Let's assume yes.
Q. Can we go to D3, tab 3, which is Dr Niels' first report.
Go to page 329, paragraph 6.75, he says:
"I have also assessed the extent to which
Sainsbury's allocation of total costs between fixed and
variable may have been subjective. To do this, I have
reviewed Sainsbury's final survey submissions to
Deloitte in several earlier draft versions of this
submission. I have provided an overview of the cost
allocations in the various drafts and how they changed
in the different versions in appendix 2."
If we go to page 422 we will find appendix 2.
A. So this is yellow.
Q. I don't need to refer to the detail of it.
A. Okay, it is just for me to understand.
Q. Mine is actually blue but it doesn't really matter.
A. Okay.
Q. But you were aware that he has carried that out, you
rely on it and -- or you comment upon the exercise,
rather?

A. I comment on it and we will get on to what I rely on
later --
Q. We will. If you go to D2.1, tab 3, which is your second
report. At page 522, at paragraph 482, and this is
where you are commenting on the various Sainsbury's
drafts, you say:
"It is also not the cost that all cost items move
from fixed to variable. For instance, out of the two
relevant broad cash ...(Reading to the words)... 54% of
cash costs move from variable to fixed but 13% also
moved from fixed to variable."
But as that demonstrates, the move in the
Sainsbury's drafts was in favour of fixed rather than
variable, wasn't it, the overall effect?
A. The overall effect, yes.
Q. If costs, as I think we have agreed, are classified as
fixed rather than variable that is likely to lead to
a lower MIF?
A. That is correct, but may I clarify? Basically, if you
go from the start -- and this is the example I say about
the finance department not knowing quite what it was
doing -- so, in the email of -- sorry, everyone, it is
page 422.
Q. This is confidential, if you are going to refer to the
detail. I am not stopping you but we might need to go

into close.
A. I am trying to avoid --
Q. I'm doing what you do for me.
A. Thanks very much. In effect, what they -- Sainsbury's
on their own did in 2010/2011 came up with an allocation
and I was sent this version of the 5th/7th 2013.
Q. So the first draft in this?
A. The first draft, I was sent this and I commented on this
saying "I don't understand what's going on here" because
they have managed to actually reduce the number of
categories that were by variable, compared with
2010/2011, but the variable cost of cash actually had
gone up significantly. So when it came to the
estimates, which you can see in my report -- and we are
referring to it, it is in table 7-6 -- if they had
adopted their 2010/2011 categorisation, which they
submitted to the Commission -- so in effect what
happened between MDR -- does everyone have -- I'm sorry
if I'm --
Q. I'm actually about to come onto this, my next question
is about table --
A. Please do the question.
Q. If that helps. First of all, you said you were shown
the 5th July 2013 draft, had you already been retained
by Sainsbury's in relation to this litigation?

A. Yes, I was retained in October, late October 2012.
Q. Did you see the other draft, did you see the 24th July draft?
A. I was on holiday.
Q. Did someone in your team review the 24th July draft?
A. They must have seen -- I would assume so.
Q. Were you involved throughout this process, you or your organisation?
A. We were involved and it would have been my Rotterdam office who would have looked at this survey.
Q. But were you principally responsible for it?
A. I'm always responsible for anything I say in terms of this.
Q. Let's go to D2.1, tab 3, which is your second report --
A. Yes.
Q. -- page 520 --
A. Yes.
Q. -- paragraphs 466 to 467, and table 7.6.
A. Mmm.
Q. My understanding of this is that if we are looking at, in relation to credit, the changes made by Sainsbury's to its cost classifications from its first draft to its final submission, would cause a MIT-MIF calculated on the basis of those costs to decrease by roughly threefold; is that right?

A. This is why I need to explain the actual process. So, whoever -- I think it is Bruce Lessels or the department -- managed to come up with a survey that would have implied 0.31 and 0.29, you see the first email which is 5th July. If they had actually followed their classification in 2010/2011, basically they would have had MDR0062728, and then that 0.18.20 because they failed to actually be consistent and managed to actually get a higher MIT-MIF despite the incentive that you have outlined.
So this is the error that they have made. When I received the 5th July email, I talked to my team and my team looked at the estimate and basically compared it with 2010/2011 and said: they are just not consistent.
So what happened in the end was that they adopted eventually the 2010/11 classification and the rates came down, that is true, and the final submission is 0.09 and 0.11.
Q. So taking table 7.6, the MIT-MIF, comparing the analysis in the first draft with the final submission, the MIT-MIF -- resulting MIT-MIF decreased by roughly threefold, correct?
A. As I say, if you had actually been consistent in Sainsbury's finance department, they should have employed 2010/2011 classification and they would have

had something closer to the 0.118 and 0.20.
Q. But am I right about the rate of decrease --
A. Sorry, let me be very clear, there is a rate of decrease here.
Q. That's also consistent -- I'm not saying this did or didn't happen, but it is also consistent with a merchant categorising cost so as to achieve a lower MIF?
A. If you had had applied the 2010/2011 we actually have a MIT-MIF which is in the particulars of claim, which are in April 2013, which is a MIT-MIF based upon the scenario 1 of 0.04.
MR JUSTICE BARLING: That's the one based on 2010/2011, which you say is the right one?
A. It is but the thing is this is based on the different methodology. The 2010/2011 survey and the particulars of claim were based upon scenario 1, which is one transaction, and I have said I did not like that in my report, I wanted something different and in Deloittes 2011/2012, (a) the survey itself is not the same as 2011 but they have also gone and asked different questions to elicit the avoidable costs over three to four years. So we are talking apples and pears here.
PROFESSOR JOHN BEATH: So MDR0662728 uses scenario 1?
A. No, it uses the 2010/2011 cost classification.
PROFESSOR JOHN BEATH: Under --

A. Under scenario 2.
PROFESSOR JOHN BEATH: Under scenario 2, sorry.
A. But we said "Look, at the start please do this, because you have submitted something to the Commission previously and you have got to have some sort of consistency". It is not that I wanted or I believe, even, Sainsbury's -- I mean they got it horribly wrong, horribly, and that's what I have detailed. And I hasten the add the first expert report is a totally and utterly different exercise because I viewed the final submission, and by the way, I actually -- I should state categorically, I was asked whether they should send this submission in and I said no because I was not happy about some of the supporting evidence. So when -- in June/July 2014 I started the process again, and Professor Beath that is the annex you have seen.
PROFESSOR JOHN BEATH: Yes.
A. I hope the Tribunal sees it is a quantitatively and qualitatively different exercise.
PROFESSOR JOHN BEATH: Right.
MR HOSKINS: In relation to reviewing these drafts, the Sainsbury's drafts, who at Sainsbury's was primarily responsible for dealing with you?
A. David Brooks is head of finance and is still head of that particular department, but I was actually engaged

with Mr Ed Anderson and Ms Kate Botting(?), who are in Sainsbury's legal team.
Q. Was Mr Brooks aware of the function you were performing?
A. Yes, as an independent outside expert. He was made aware that I was not there to try to get any particular figure.
Q. If we go to paragraph 468 of your second report?
A. Yes.
Q. You say:
"Secondly, in my own analysis, I have not relied on Sainsbury's cost classification but I have thoroughly reviewed all cost items and determined how they should be classified."
A. Yes.
Q. If we go still in this report to paragraph 744. It is page 577 --
A. Yes.
Q. -- you see what your results are. The resulting average MIT-MIF is 0.15% for credit cards. That's the figure you get taking the Sainsbury's data but reclassifying it, whether you think it is fixed or variable over the three to four-year period?
A. That is correct. It is my classification. It is fully set out in annex B.
MR JUSTICE BARLING: Sorry, I think I have missed something,

I want to be sure before we leave this topic. When we looked at Dr Niels' report at tab 3 of D3, and we looked at the table which is confidential at page 422, which of those -- because it is so small I'm having trouble reading it -- drafts and scenarios is the one that you eventually -- is it the one dated 24th July 2013 on scenario 2, MDR0062728? Is that the one that represents your final position?
A. It is not my final position.
MR JUSTICE BARLING: No.
A. Let's be very clear, these are emails about a process of filling out the Deloittes 2010/2011 survey that was done in 2013. The eventual one, I think, was -- you are right it is too small -- but I think it was sent -- in fact, late September.
MR JUSTICE BARLING: Yes.
A. I think it is late September. But we don't have a date here. Basically there was confusion as to whether it was actually sent, and apparently it was sent even after I had said it wasn't fit for purpose.
MR JUSTICE BARLING: None of these represent something which you thought was fit to be sent, is that the position?
A. Exactly so.
MR JUSTICE BARLING: Is that the position?
A. Exactly. None of this. That's why I went through the

process which you see in annex B, in the following year.
MR JUSTICE BARLING: Could you just take me -- remind me where annex B is. I'm sorry, Mr Hoskins, I just want for my note to get this right. Where is your annex B?
A. Annex B to the first expert report, so I think it is in --
MR JUSTICE BARLING: D2.
A. This is a weight lifting course.
MR JUSTICE BARLING: I don't know whether this is confidential or not.
MR BREALEY: D2.1.
MR JUSTICE BARLING: It is in D2.1 the annex B, is it?
MR BREALEY: Tab 3A.
MR JUSTICE BARLING: Tab 3A. Right, okay, sorry.
A. There is a letter from Mischon de Reya at the front.
MR JUSTICE BARLING: It is at table B.
A. So it is 659A.10, is the start. You can see the table of contents.
MR JUSTICE BARLING: Right, I see.
PROFESSOR JOHN BEATH: But the meat comes at A.83, doesn't it, where you actually give the reasoning behind the cost categorisation?
A. That is right, sir.
PROFESSOR JOHN BEATH: That's where the meat of the report is.

A. I would say the meat is roughly --
PROFESSOR JOHN BEATH: That's where the definitions are?
A. It is where the definitions are and then I do a calculation. The whole purpose of this depth was to try to get a document that could be replicated by anyone who picked it up and could get the calculations and do sensitivity analysis. See, I recognise that Deloittes and the confidentiality concerns in Deloittes means that sometimes it is very hard to replicate.
MR JUSTICE BARLING: Right. I think that's clarified that. Thank you very much. Sorry, Mr Hoskins, carry on.
MR HOSKINS: Not at all. If we go back to your table 7.6, at D2.1, tab 3, 520. What we see in relation to credit, therefore, is five examples of a MIT-MIF based on different classifications of fixed and variable costs; is that correct? That's what that table is?
A. There are different classifications, yes.
Q. What that shows us is it proves the point of just how sensitive the MIT-MIF is to the classification of costs as fixed or variable, which the Commission described as critical, yes?
A. It shows that if you get it wrong, then the numbers change, but the thing is, what you need to actually see is, if we go to the Deloittes actual figure, that they quote, it is for credit cards, it is 0.13%. Now, let's

get the causation right, the 0.15 is based on annex B, the 0.13, which they derive over 200-odd large merchants and we ought to define that as well, is 0.13.
Q. It is not just if you get it wrong that it varies because fixed variable costs is a bit of science and a bit of art. It is subjective by nature. You accept that at paragraph 469.
A. I do accept that.
Q. All I'm saying is that, because of the degree of subjectivity in the classification of fixed or variable costs you can actually get a quite widely divergent MIT-MIF cost as you see in table 6, correct?
A. You are able to achieve that.
Q. Can we go to E3.10, back to the Commission's survey.
A. Yes.
Q. Tab 202, page 4297. At paragraph 13 the Commission says:
"DG competition undertook computations of the MIT using all the data coming from surveyed merchants, including their allocation between fixed and variable costs. It has also undertaken a computation of the MIT which are based on ...(Reading to the words)... The choice to deploy econometric techniques has been motivated by two main objectives. First reducing the dependency of the results on the merchant's judgments

and cost nature and (2) treating the heterogeneity of merchants and trying to perform out of sample predictions."
Then they go on to say:
"First, econometric techniques are capable of identifying fixed and variable costs without relying on the merchants' views."
Do you agree that the use of econometric techniques reduces the dependency on the merchants on judgments on whether costs are fixed or variable?
A. It reduces the subjectivity but econometrics is not like pressing a button and getting the right result. If you are objectively measuring the wrong thing, and that's my contention here, then it is garbage in, garbage out.
Q. Can we go back to your second report, D2.1, tab 3, page 520, paragraph 469 which we have seen you say:
"It is the case that there is some degree of ...(Reading to the words)... which are themselves a matter of subjective judgment."
In conducting its own econometric analysis, if anything, the Commission would have preferred a lower than a higher MIF, wouldn't it?
A. Sorry, I don't quite understand the link to objectivity.
Q. You say that, fairly, when you are putting together an econometric model, you have to make certain

assumptions?
A. That is right.
Q. You have to use your skill?
A. Yes.
Q. So you say, well, econometrics involves a degree of subjectivity. My point to you is that the econometric model that the Commission created and carried out is not one that's created by someone with an incentive to produce a high MIF. The Commission would either have been neutral or may even have had a sneaking incentive to create a lower MIF, because that's what the Commission has been trying to do for years.
So in terms of exercising subjectivity, it was the Commission who were being subjective and they had no interest in a higher MIF, correct?
A. I think we need to get off the idea of subjectivity --
Q. It is you that introduced it. It is 469, I'm dealing with your report.
A. Okay, then I will explain it in very simple terms, in terms of what we are trying to measure: what we are trying to measure is the avoidable cost of going from cash to cards for a 10% increment over three to four years. That is a within firm estimation. Now, what they did econometrically was not that at all.
It was an increment across a wide range of firms, so

remember what "large" is here, it is 20 to 20 billion. 20 million, 6 to 7, to 200 category, and then above that are very large firms. You can see there is an inherent number of different cost functions.
They did it effectively with one year's data.
PROFESSOR JOHN BEATH: I think what you mean is the only feasible set of data these people could have, because they have one year of data, is a cross-section?
A. Is a cross-section it is not --
PROFESSOR JOHN BEATH: So the only way you could estimate a fixed cost and variable cost is by fitting a linear line through this cross-section. I just make a factual point, I'm sorry.
MR HOSKINS: No, it is very helpful.
PROFESSOR JOHN BEATH: It is very hard to see how, if you -- with given numbers, you fit a straight line through the cross-section, you can make any judgments at all about bias or trying to get particular results, the results are simply what the data you have -- they are embedded in the data.
A. Yes, and --
MR HOSKINS: I'm not trying to make submissions but, in a sense, that's what I was trying to get across because we have looked at Commission scenario 2, which is based on the merchant's approach.

PROFESSOR JOHN BEATH: No, no --
MR HOSKINS: You have my point, and the Commission itself says econometric analysis reduces the dependency on subjectivity.
A. It is not about pressing the return button and get the right -- the thing is, if you are measuring the wrong thing, if you are thinking about the increment and you are thinking about all this huge range of firms from 20 million to 200 or 12 -- 20 billion, you are not actually measuring -- if you don't take full account of, for example, the admitted variable bias issue, Professor Beath. So the econometrics, if it is not correct -- and I will show you why it is probably not correct -- when it produces certain estimates is objectively measuring the wrong thing. And, you know, what I will try to do and I --
PROFESSOR JOHN BEATH: I think we could have a seminar on this but I don't think --
MR HOSKINS: I think we are having a seven-week seminar.
PROFESSOR JOHN BEATH: I just wanted to make a rigorous technical point.
A. It was a very good point, sir.
MR SMITH: When you say it is measuring the wrong thing, what exactly is wrong about it? What is the wrong thing?

A. Well, we have a cross-section of data, we have firms that go from 20 to Sainsbury's size, 20 million to Sainsbury's size, in that sample. There are all these different types of cross function and we are trying to estimate what the econometric scale across one year's data, across all these different sizes of firm.
That is not really telling us what happens within a firm when you change the component of cash to the component of cards. Ultimately, that's what we are trying to measure. What changes? The avoidable cost over an increment. What's the increment? 10%. Is the 10% reasonable or should it be higher, should it be lower? That's scenario 2.
You know, I appreciate that there are these issues about DG competition wanting politically to get lower interchange fees. But my understanding, from living in Brussels and having been in the Commission, and understanding these political pressures, is that in this case, this was the economist team --
MR HOSKINS: I'm not sure this is appropriate evidence, I'm sorry to interrupt. I don't want to go into what the --
MR JUSTICE BARLING: I wouldn't worry too much about it. But I would still like to understand the answer better to Mr Smith's question, you know, about --
MR HOSKINS: Can I see if I can manage it with a question

which is: is your main objection to the Commission's econometric analysis, the fact that it doesn't sufficiently take account of the heterogeneity of the merchants in the sample?
A. We can do the heterogeneity --
MR JUSTICE BARLING: Can you not answer yes or no to that question? It would help us.
A. It is a no, it is more than the heterogeneity.
MR HOSKINS: But is that part of it?
A. It is part of it.
Q. Well, that's a start.
MR SMITH: Okay, apart from heterogeneity then, is it the fact that one only has one year of data, is that another issue you have?
A. That is another issue. That is what it is. What we are trying to get here is the average transaction benefit. I'm not worried whether it is the average merchant or not, I'm worried about the average transaction benefit because I'm trying to get something that is actually measurable for the purpose of article 101.1. That's what I'm trying to measure. So I want to know what are the benefits of swapping cards and cash, and I don't think I'm getting that via the econometric approach, or at least there is something going on here -- and I will show you in practical terms later why I think it is

coming up with wrong estimates. Let's leave that for now.
MR SMITH: Let me just ask you one very simple question, just this: are you saying that the econometric approach is a misconceived approach no matter what data you use? In other words, that it is --
A. No --
MR SMITH: -- simply not the way to do it, you should look at, as you have done, the actual costs of an enterprise.
A. If we had managed to have ten years' worth of data and we had managed to account for all those reasons why costs change in a firm, or between firms, so as you get the issuers -- as you get larger, you have different things, you have legal departments coming in, so you have different fixed costs and all those other things. If it had taken account of that, you could understand it. But it is not taking into account that. It is trying to measure across firms when it is easier in this case actually to do, within the firm, and measure the -- then the issue is, is that estimate representative? Then you have to work out whether it represents a fair share. That is the exam question.
MR SMITH: Right, just identifying the issues you have with the data, it is period of time and the fact that the data doesn't sufficiently differentiate between sizes of

firm?
A. The data itself goes between 20 and 20 billion, in terms of size, but we are not actually taking full account then of how things --
MR SMITH: The cross balance may be different --
A. The reasons why things are changing over time in terms of the cost function. So we have a large -- the implied increment in the econometric approach is rather large, so it is an empirical point, should it be large or should it be 10%, or should it be some other number?
MR SMITH: Thank you.
MR HOSKINS: Can we go to your annex B, so that is D2.1, at tab 3A. It is page -- I will ignore the 659A, it is page 127 in that tab. (Pause)
A. I have 125.
Q. So you don't have 127? It runs out?
MR JUSTICE BARLING: Mr Cook has it. (Handed)
MR HOSKINS: Have you got 126?
A. I don't have 126 either.
MR SMITH: Are you referring to bundle numbering or to the internal numbering?
MR HOSKINS: The page I'm looking at has the number 659A.127 on it.
A. Sorry.
MR HOSKINS: That's fine. It's not the easiest numbering

81

system.
A. So 126 is the DSS cost and cost of equipment.
Q. Yes, and it is the top of 127 I want to look at. So at 8.6:
"Relative use of cash and cards in the UK in the past 10 years, the number of value and card transactions ..."
I think it has been cut off. It probably should be "in the UK".
A. Yes.
Q. "... has been steadily increasing", I think it should say.
A. Mmm hmm.
Q. Then if we go over the page, 259, you say:
"However, the increase in card transactions cannot be directly interpreted as a displacement of cash transactions, as at least a part of this increase may be due to the general increase in the value and number of transactions."
What you then go on to do is try to estimate the cash displacement rate; is that correct?
A. Yes.
Q. Then at 261 you come up with your estimate and your estimate is for an annual displacement ratio of about 7%; is that correct?

82

A. It states there 7% but that's a mistake.
Q. What should it be?
A. If I go to Dr Niels' table, figure 3.1, I think we will get a ballpark idea of what it should be.
Q. The place I was going to take you to, to see if this was correct or not, let's see if we can shortcircuit it, was D3.1, tab 6. This is Dr Niels' second supplemental report. Then if you go to page 601, it is paragraphs 339 and 340. He supports what I hope is the same error that you have said there is, and he says that because you give an annual figure of 7%, given that we are dealing with a three to four-year period, what you should have actually said was a cash displacement rate of 20 to 25%; is that the error you are referring to?
A. The error I refer to is the 7%. In fact, the next error is actually in Dr Niels' next sentence. It is not an error in the sense that if you take cards, that is debit and credit cards, you would get that figure, but we are talking about credit cards and, hence, I wanted to go to figure 3.1 of Dr Niels' first report just to give you a --
Q. So you agree with his correction there at 340 but you want to -- he deals with cards and you want to clarify it further in relation to credit cards; is that correct?
A. Yes, sir.

83

Q. Show us what you want to --
A. It is figure 3-1 of Dr Niels' first report. It gives you an overview of how things have changed in the UK.
Q. 247, Mr Brealey kindly informs me.
MR BREALEY: D3, 247.
A. D3.
MR HOSKINS: D3, tab 3, page 247.
A. So figure 3.1, which is on 247, the point I'm making is that if you see over -- it is a very nice figure going from 2000 to 2014, credit cards is the -- can everyone see the colour at the bottom? It is the very dark one. That is credit cards. You will see share of the payment methods, it actually has not moved much. Let's assume zero.
The displacement of cash, which I assume is the ATM and cash, which is the light green, so cash is getting squeezed. What's squeezing it is actually the debit. So the shift is actually the debit card. That's also, by the way -- we see that, a similar picture, in Australia.
Q. So what is the correction you want to make to your figure, D2.1, tab 3A, page 130, paragraph 261?
A. So the Commission has an increment of 10% but if you took these figures on face value, the cash displacement to credit card would be 0.

84

Q. You are changing your evidence from annual displacement ratio of about 7% and you want to say it is now 0?
A. I'm just looking at this figure saying, look, we have to sort of step back --
Q. But what's your evidence, because we have got your evidence at the moment -- let's look at it, it is D2.1 --
A. The reason --
Q. Please let's look at, this is important.
A. Sure.
Q. D2.1, tab 3A, page 130, paragraph 261. Now, there is a fair bit of reasoning before that, but the punchline is the last sentence of 261:
"This corresponds to an annual displacement ratio of about 7%."
What is now evidence now? What's the figure that you want to give?
A. Look, I would be quite happy if we keep to the Commission's 10%, as a very conservative figure.
MR JUSTICE BARLING: So you change your 7% -- you prefer to have 10% there; is that what you are saying?
A. No, the point about this paragraph is to say was the Commission's 10% reasonable? And I made the point, which is erroneous, that it looks like 7%. If you go to the figure, it could be 0 but I'm simply saying, look,

let's keep to 10%.
MR JUSTICE BARLING: You say it doesn't matter what it is?
A. It doesn't matter. It doesn't matter, we could actually have said zero.
MR JUSTICE BARLING: As a matter of interest why did you say it was 7 again, what was the mistake?
A. Because I looked at it and I basically, as Dr Niels has pointed out, I have made an arithmetic error and if Dr Niels' calculation -- he made -- he suggested it was 25%, and that was for cards, and I'm making the point that actually the growth or the substitution seems to be debit card and cash, not credit card and cash.
MR HOSKINS: To be fair to Dr Niels, he was actually following through the logic of your 7%.
A. He did.
Q. That was not his own figure, he said on your own analysis of 7% that should have been the correct figure if you followed the logic through.
A. If I followed the logic in terms of credit cards but in terms of -- sorry. He followed my logic, my logic was wrong. It should have been on credit cards. I got the arithmetic error. This 25% though is on cards and, as I suggested in figure 3.1, the substitution looks to me on this basis of this evidence from cash to debit, not cash to credit.

Q. But you are ignoring charge cards, aren't you, in figure 3.1? We are dealing here with credit and charge cards as against cash, aren't we? If you include charge cards, then the displacement is more marked, isn't it?
A. I can't even read that up there.
Q. Well, the charge card is the light blue.
A. Yes.
Q. You will see that colour, it is -- if you go on the vertical axis, 80%, you will see a little blue block. We have all got different colours. It is a dark grey. The first block between the 80 and 90 on the vertical axis?
A. That looks like it has grown by, let's say, 5% over the period.
Q. You have to add that in when you are comparing displacement of cash as against credit cards.
A. I agree.
Q. So you have to put that in as well?
A. Yes, we should.
Q. In terms of the costs, because we are looking at here costs which vary over time in terms of handling cash, as opposed to accepting cards, and in this specific instance credit cards, but the costs of accepting debit and credit cards, it doesn't matter, you have to look at them altogether, because the infrastructure is the same,

whether you are accepting a debit or a credit card.
A. Mmm hmm.
Q. So the distinction you make in saying you have to look at just credit cards isn't correct, is it, because the infrastructure is the same, therefore one is looking at the total costs?
A. The infrastructure may be fixed costs which are not contained in the calculation. If they don't vary over time, that's the three to four years. If they do, they are in.
Q. For this purpose, there is no utility in the distinction between debit or credit because the infrastructure is the same: yes or no?
A. In terms of the actual increment, can I think about it for a few more minutes?
Q. We do have to move on. I have one more question on this topic --
PROFESSOR JOHN BEATH: Before we move on, and while he is thinking about it, could I be assured that the data set that was used to construct figure 3.1 is exactly the same as the data set that was used to construct figure B6.5?
MR HOSKINS: Sir, 3?
PROFESSOR JOHN BEATH: In Mr von Hinten Reed's second report, before the phrase we have been looking at about

displacement ratio, it is based upon a chart.
MR HOSKINS: Sir, can you give me the bundle reference?
PROFESSOR JOHN BEATH: Sorry, D2.1, tab 3, 659A.129, then on the page before the statement about 7%, the paragraph says it was based upon this calculation and this figure, and it covers not quite the same but almost the same period, has a larger aggregation of units, I just wonder whether it is the same data set used.
MR HOSKINS: I will ask Dr Niels --
MR JUSTICE BARLING: In that case --
MR HOSKINS: I have one more question on this, otherwise we will lose the chain. So if you will just let me finish off.
MR JUSTICE BARLING: Okay, go on.
MR HOSKINS: I need to go back to D3.1, tab 6, page 601. At paragraph 3.41, he says:
"As I explained above, the Commission's medium-term approach ...(Reading to the words)... over a three to four-year period."
Then he goes on to say:
"Given that a larger level of cash displacement ...(Reading to the words)... timeframe ..."
You corrected your error, but if you have a higher cash displacement rate, that provides evidence that a greater proportion of fixed costs should be included

than the medium-term approach considers.
I want to unpack, because that obviously includes the area you corrected, but is it correct that the greater the cash displacement, the greater proportion of fixed costs should be included than the medium-term approach suggests, ie the greater the cash displacement, the less costs are fixed?
A. The greater the cash displacement, the costs that are displaced will increase.
Q. Therefore it should be variable rather than fixed?
A. It should be variable rather than fixed.
MR HOSKINS: Sir, that is a good point to break.
MR JUSTICE BARLING: Good, right, we will have a break.
(3.20 pm)
(A short break)
(3.30 pm)
MR HOSKINS: I'm glad it is Friday. Am I allowed to say that?
MR JUSTICE BARLING: Yes, you are now.
MR HOSKINS: It's too late.
PROFESSOR JOHN BEATH: Some of us have been away from home for a while.
MR HOSKINS: There we are.
MR JUSTICE BARLING: Okay.
MR HOSKINS: I have an answer to Professor Beath's question

on whether these are based on the same data. The answer is: they are not.
PROFESSOR JOHN BEATH: They are not, okay.
MR HOSKINS: So if we go to Mr von Hinten Reed's figure 6.5, which is at D2.1, tab 3, 659A.129 --
PROFESSOR JOHN BEATH: Yes.
MR HOSKINS: -- you will see that the source stated there is the UK Cards Association --
PROFESSOR JOHN BEATH: Yes.
MR HOSKINS: -- and have debit cards credit and charge cards cash and cheques. Figure 3.1 in Dr Niels' report, so that is D3, tab 3, 247 came from MasterCard internal documents.
PROFESSOR JOHN BEATH: Thank you.
MR HOSKINS: Whether they obtained information from the UK Cards Association, I don't know, but they are not on their face from the same source.
PROFESSOR JOHN BEATH: Thank you.
MR HOSKINS: Obviously, it is clear, figure 3.1 includes more types of payment.
PROFESSOR JOHN BEATH: Yes. That's why I mentioned in relation to Mr von Hinten Reed's -- it seemed to me aggregating things together.
MR HOSKINS: Yes.
There was a question that Mr von Hinten Reed asked

for more time to think about, I don't know if he wants to take up that --
A. Yes, just a small -- in terms of thinking about common costs and fixed costs, in annex B, 659A.34, so in effect, we have the first table which is table B2.13 on debit cards. The second table is overleaf, B2.14 on credit cards. So I have separately treated the fixed and variable costs involved in debit and credit card payments. To the extent that there are common aspects to them, they are in the cost allocations. In my view, the increment is not the place to actually change. What we are trying to ask there is, what is the change that we observe from cash to a credit, or in charge card, not a debit card. That's not what we are trying to assess here.
So I have actually calculated the MIT-MIF separately for the credit card and the debit card, the debit card being slightly higher.
Q. Can we go to E3.10, which is the Commission's survey again.
A. Sure.
Q. Tab 202, page 4315, paragraph 82. So E3.10, tab 202, page 4315. It is paragraph 81, the Commission says:
"Merchants in this population are likely to be heterogeneous with respect to the relative cost payments

...(Reading to the words)... need to be taken into account."
A. Mmm.
Q. Skipping the next sentence:
"The size of the merchant may also have an impact since a larger size may imply different organisation of the business or a specific payment process and therefore a different transaction cost."
First of all, do you agree with the Commission that the relative costs of payment methods may vary between merchants?
A. Yes.
Q. Do you agree that one of the factors that may have an impact on costs is the size of the merchant?
A. Yes.
Q. Can we go to E3.14, tab 266. It is the Rysman and Wright article. If we can go to page 5737. We looked at this again earlier in another context. It is a second complete paragraph on the page that begins "Firstly surveys are often conducted":
"Firstly surveys are often conducted only with large retail firms, firms that will tend to have lower costs of accepting cash due to the economies of scale involved in cash handling, as opposed to cards which are fairly scale invariant."

Do you agree that large retail firms will tend to have lower costs in accepting cash due to economies of scale?
A. Yes.
Q. Can we go to E3.5, tab 99A. This is the Rochet and Tirole article from 2008, yes?
A. That is correct.
Q. The numbering is 2194A, it's 0029 that I would like to go to. You will see the third paragraph on that page begins "First, in the short run"; do you see that?
A. Yes.
Q. If you skip five lines down, there is a sentence that begins:
"Third, merchants are heterogeneous and an IF that properly guides cardholders' decisions must reflect the ...(Reading to the words)... at the social optimum."
Do you agree with that?
A. In terms of the statement, yes.
Q. Can we go to E3.10, tab 202, so the Commission survey again. E3.10, tab 202 at 4295. Again, it is something I think we looked at in another context. The first paragraph in that page, paragraph 4 continues at the top of the page. If you go up from the bottom of that paragraph seven lines, you get to a sentence that begins:

"In order to maximise coverage ..."
It begins in the middle of the page.
A. Yes.
Q. The Commission says:
"In order to maximise coverage and to ensure the best quality data, it was decided to ...(Reading to the words)... Eventually, this represents a trade off between precision of data and sample size and representativeness."
We see from that the Commission study only took account of large merchants, yes?
A. Large merchants above 20 million.
Q. The Commission believed that that had implications for the representativeness of the study, correct?
A. In that it didn't actually have small firms in it.
Q. Can we go to paragraph 23 in this document. The Commission says:
"The report finally explores the possibility to obtain figures that would describe the whole merchant population and not only large merchants. This, however, requires very strong assumptions on the cost functions of the different payment means for smaller merchants. Taking this into account and after careful consideration, the Commission therefore considers that without further data from small merchants, it is not

possible to draw reliable conclusions from the study concerning the level of indifference of all merchants."
Do you agree with the Commission that without further data from small merchants it is not possible to draw reliable conclusions from the study concerning the level of indifference of all merchants?
A. You cannot get the level -- at least you can calculate what it should be for all merchants but you can't get the level of indifference for all merchants because we don't have small firms.
Q. Do you agree it is not possible to draw reliable conclusions concerning the level of indifference of all merchants for that reason?
A. The meaning of "indifference" to me is -- in the exam question is that firms are no worse off, that's the Article 101.3(b) criterion. So I can tell you that large firms will be worse off if, for example, they have to pay a MIF, which is estimated for the category 6 to 7, but what I can't do is tell you whether actually the small firms are benefiting and offsetting the loss made by large firms. That's what I can't do.
Q. Do you agree or not with the Commission's own assessment of its own survey that, without further data from small merchants it is not possible to draw reliable conclusions from the study concerning the level of

indifference of all merchants?
A. In that context which I have just said, yes.
Q. Dr Niels has sought to deal with this problem by relying on the cost data for the group of smaller merchants within the Commission's sample of large merchants, which he has taken as merchants with an annual turnover between EUR20 million -- sorry, the Commission's sample is EUR20 million and EUR200 million, but you are aware of that, aren't you, he relies on a subset of that data?
A. I am and let's be clear it is category 6 to 7 and the larger merchants than that are category 8. So if I refer to that --
Q. If we go to your second report, that's D2.1, tab 3, 523. D2.1, tab 3, at page 523, it is your paragraph 489, this is where you deal with what Dr Niels has done in terms of the sample he has taken, and you say:
"I note that excluding the largest merchant seriously limits the reliability of results and their applicability to the UK. As 130 merchants out of 256 included in the sample ...(Reading to the words)... as also shown by lower R2 values."
Your preferred approach is to rely on the cost data submitted by Sainsbury's to Deloitte which you then reassess for fixed or variable, correct?
A. That is correct and then I try and do sensitivity tests,

for the UK discussed above.
"As I mentioned earlier, no data is available for the cost of payments to small merchants ...(Reading to the words)... being twice as high and three times as high. I apply the sensitivity test to three MIT-MIF estimates."
You don't cite any evidential basis for your assumption that the MIT-MIF for small merchants is twice or three times as high as for large merchants, why is that?
A. That is correct, because I do not have any evidence on the exact costs for cash and cost of payments for small firms. In 7.7, by the way, large merchants there are categories 6, 7 and 8.
Q. Can we go back to the Commission's survey. That's E3.10 at tab 202. This time can we go to page 4350, it is paragraph 185. It is E3.10, tab 202, page 4350. If you pick it up at paragraph 185:
"As regards the distribution of the MIT MSC levels of individual merchants, the figures below indicate heterogeneity among the merchants in the sample. In particular, where the MIT MSC is between 0 and 0.5 for the majority of merchants, there is a non-negligible number of observations resulting in very high or negative sales."

which kind of replicate what category 6 to 7 would look like.
Q. But your basic approach, by relying on the cost data submitted by Sainsbury's, is to rely on a sample of one, isn't it?
A. It is a sample of 1 and then we conduct sensitivity tests to try to replicate data for a wider sample.
Q. So you rely on a sample of one with sensitivity analyses and Dr Niels relies on a sample of 126?
A. He relies on a sample of 126, but by excluding or focusing on the average merchant you are not actually focusing on the average transaction benefit, which is what we get from the literature as being the appropriate thing to measure.
Q. Let's go to your second report, again. D2.1, tab 3 at 526. Paragraph 505, you say:
"We know, however, that in the UK a typical payment takes place at a large retailer."
Then at the end of the paragraph you conclude:
"Therefore, it is reasonable to assume that the MIT-MIF obtained for these retailers would be representative for the vast majority of the UK sales."
Then at 506 you go on to say:
"As a sensitivity check I consider how the MIT-MIF ...(Reading to the words)... based on the Eurostat data

Then, over the page, the Commission sets out figure 11, which is a distribution of estimated MIT MSCs by number of merchants. We know from paragraph 14 the number of merchants in the sample is 254, yes?
A. Yes.
Q. The range of MIT MSCs is on the horizontal axis. You see that below 0, minus 2, minus 2 to minus 1, minus 1 to 0.5 etc, that is the range of MSC MITs, yes?
A. Yes.
Q. Then the number of merchants within each range is on the vertical axis, yes?
A. Yes.
Q. We see from this graph that most merchants had a MIT MSC from the 0 to 0.5 range. That's in the middle of this, yes?
A. Yes.
Q. If you move to the right, we see around 15% had a MIT MSC in the 0.5 to 1% range, yes?
A. Yes.
Q. If you take the median point of those ranges, so for the first we are looking at the median of 0 to 0.5 is 0.25, and the median of the 0.5 to 1 is 0.75, yes?
A. Could you re-do that one?
Q. Of course. I'm looking, first of all, at the most popular category, 0 to 0.5. The median of that is 0.25.

I'm just saying half of 0.5 is --
A. I should have said yes.
Q. If you go to the next range, 0.5 to 1, the median is 0.75?
A. Yes.
Q. 0.75 is around three times higher than 0.25?
A. Yes.
Q. So that indicates that around 15% of larger merchants had a MIT MSC around three times higher than the majority of large merchants, yes?
A. Yes.
Q. Let's do the same exercise for the 1% to 2%. That's three in from the right. 1% to 2%.
A. Yes.
Q. Around 6 to 7% of large merchants had a MIT MSC in that range, yes?
A. Yes.
Q. Take the median of that, that's 1.5%, yes?
A. Yes.
Q. If you compare that again with the most popular range, the median of which is 0.25, what we see is 6% to 7% of large merchants had a MIT MSC around 6 times higher than the majority of large merchants, correct?
A. Yes.
Q. We will do the same again for the 2% to 5%, the median

of that is 2.5%. There is about 5% in that range, yes?
A. Yes.
Q. That shows therefore that around 5% of large merchants had a MIT MSC that was 14 times higher than the majority, yes?
A. Mmm.
Q. Then, finally, if you take the last category on the right, around 2% of large merchants had a MIT MSC above 5%, and if you do the same exercise that tells us that around 2% of large merchants had a MIT MSC that was 20 times or more higher than the majority of large merchants; is that correct?
A. Yes. Remember that you have got MSC, so you have got the acquirer margin coming in here.
Q. But that's minimal compared to the --
A. It is not so minimal all the time. But your point is taken.
Q. Of course this survey was based only in large merchants, we know that, don't we?
A. Yes, above 20 million.
Q. One would expect the disparity to be even greater between small and large merchants, wouldn't you?
A. Small in terms of small 1 to 5 and 6 or?
Q. I mean small outside this category --
A. So 1 to 5?

Q. You accept that, the disparity you would expect to be greater?
A. I don't know what 1 to 5 really is, but I'm just -- I will assume for the purpose of this that it is.
Q. I think you are saying the answer is yes, you would expect the disparity to be greater.
A. I would expect it to be greater, based on my estimates.
Q. In your evidence yesterday you referred on a number of occasions to the interest that issuers earned from cardholders. Just to be clear, are you suggesting that the interest that is earned in that way is large enough to cover the whole scheme costs; is that your evidence?
A. The interest earned by issuers?
Q. Yes.
A. For issuing cards is greater than the cost of them issuing the cards.
Q. Is the logic of that that no MIF is necessary?
A. The logic of that is that lending, which is the process by which banks are offering credit, for example, would happen anyway, with or without the MIF.
Q. Is your logic that no MIF is necessary?
A. On that, yes.
Q. How does that tally with what you also said yesterday, which is that a MIF is necessary to balance the two sides of a four-party system?

A. If the revenues and the costs are all on one side, then the issuers are making more than the costs of actually providing the service.
Q. So is your evidence that a MIF is necessary or not necessary?
A. A MIF is necessary for the part which attracts transaction efficiencies. So the switch between cash and cards. To that extent, that benefit, I think a MIT -- a MIT-MIF measures it, also Visa 2 indirectly measures it and that's the justification for a MIF.
Q. Your MIT-MIF analysis doesn't take account of interest revenue received by issuers, does it?
A. That is right.
Q. Can we go to E3.14. At 265, it is the Tirole article we have looked at earlier today.
A. I'm with you.
Q. Page 5696, it is the top of that page, the first paragraph, Tirole says:

"There is substantial debate as to whether anti-trust authorities should factor profits into the computation of social welfare and they rarely do. Take issuer profits. If the profits associated with cardholders and ...(Reading to the words)... leads to enhanced cardholder welfare. Ultimately, what fraction of profits should be factored into the computation of interchange fee is an empirical question which we will not attempt to resolve here but there is no question that not including any leads to a conservative estimate of the desirable interchange fee."

Do you accept that it follows from that analysis that your MIT analysis results in a MIF that is too low?

A. My MIT-MIF is based upon Article 101.3. It is not based on Rochet/Tirole or Rochet/Wright or Wright and something else. The issue that Jean Tirole comes up with here is quite interesting because if we are right that interest is above the cost of issuing cards, then what is the exact market failure that necessitates some subsidy from merchants to achieve that end? I don't think there is.

Q. Let's assume, leave aside what the legal position is or isn't --

A. That's your job.

Q. That is right. If one accepts Tirole's analysis of profits as being capable of driving technological and pricing innovations as well as new entry, if one accepts that the test is social welfare, do you agree with his logic? I know you don't agree with everything but assume those factors are corrected, do you agree that failing to take account of them would lead to a MIF that was too low?

A. A MIT-MIF could be too low compared with the social optimum.

Q. Not all credit card holders are revolvers, are they?

A. Transactors.

Q. If a MIF were to take account of the interest that issuers earned from revolvers, then the MIF would be lower than it would otherwise be?

A. Yes.

Q. I think you said yesterday, but I want to clarify, would that, in effect, lead to a degree of cross subsidisation of revolvers by transactors?

A. Transactors benefit or use the 28-day funding. The question, again, is the additionality of that particular funding thing and what benefits that actually derives. It is not a benefit in terms of transactions. If it is additional sales, well, a transactor is basically paying off next month what they have used this month and it is a fact of financial services that the reason why you offer a 28-day funding is to actually attract people into having a card and, eventually, you want to become revolvers, and that's where the stickiness comes in.

Q. But do you agree that if the MIF were to take account of interest that issuers earn from revolvers, there would be a degree of cross-subsidisation of revolvers by transactors?

A. Yes.

Q. Some banks are primarily transactor banks, aren't they?

A. Yes.

Q. If a bank is primarily a transactor bank it couldn't operate without the MIF, could it?

A. The issue is primarily and the issue then is basically whether that is a statement of truth.

Q. But it is a possibility?

A. It is a possibility. If, for example, their interchange income went down, they have an option of increasing cardholder fees. If that was really on the margin of the decision, but that's not obvious.

Q. Does the MIT-MIF apply to online transactions? Is it intended to cover them?

A. MIT-MIF was designed for the cash and cards, online is cards.

Q. So is your MIT-MIF intended to cover online transactions?

A. My MIF, the 0.15 covers till operations not online.

Q. But a MIT-MIF is for not just for Sainsbury's, it is for all people who use MasterCard or Visa, isn't it? It has to be a general application?

A. That's true, that's why I go back to the way in which I characterise it. What is the benefit we are trying to measure under Article 101.3. If it is basically the

substitution of card for card, then there is no efficiency. Therefore, we don't need to measure it.

Q. But your MIF as you said therefore does not take account of online transactions?

A. That's true.

Q. Can we go to E3.14 at 265. Back to the Tirole article, if we can pick it up at 5689. It is the second paragraph on that page, the first complete one, "Even for debit cards" it begins. It is page 5689, second paragraph down begins:

"Even for debit cards ..."

Do you have that?

A. Yes.

Q. At the end of that paragraph Tirole says:

"More importantly still, e-commerce is vastly facilitated by the use of electronic payments. Cash or even cheques cannot easily substitute for cards for online purchases."

Do you agree that cash is not generally suitable for online transactions?

A. Yes.

Q. Can we go to your second report at D2.1, tab 3, page 528. You say:

"To assess efficiencies, the first issue to address is what would happen if the MIFs were not at the level

obtained by Dr Niels, but at a lower level ...(Reading to the words)... by more efficient card transactions."
But that statement isn't true, is it, if a consumer has a choice between buying online or going to a shop, because then he does have a choice between a card or cash, correct?
A. If he goes to the shop he has a choice between a card or cash.
Q. A consumer has a choice between buying online or buying in a shop?
A. Yes.
Q. Failure to take any account of online transactions will result in a MIT-MIF which is too low won't it, because the MIT-MIF has to be applied generally across all sorts of transactions?
A. The MIT-MIF is applied to online transactions. One has to think -- that is a distribution channel. So the benefits are all in terms of the cardholders not having to get out of bed or use their shoes to go down to Sainsbury's, or wherever.
So I don't quite get where the efficiencies in terms of transaction on the merchant's side -- and that's what we are measuring -- come in. In fact, the merchants are actually having to build out, imply lots of cost to actually achieve that end. I think that's in John

Roger's second statement.
Q. Are you suggesting that online transactions are a burden for retailers?
A. Online transactions are basically another distribution channel, if you are favouring one over another, what is the additional sale you are getting? Well, it may be to the individual. So Amazon may have, for example, a real interest in promoting online sales but that's not necessarily the case for a book store.
Q. Retailers set up online stores because they believe it is going to be profitable, don't they?
A. They believe that they should actually earn a profit otherwise they wouldn't do it.
Q. I'm not sure whether you accept or not that failure to take any account of online transactions will necessarily compromise the accuracy of a MIT-MIF?
A. The MIT-MIF is about measuring transaction benefits on the merchant's side, of getting the efficiencies, of transfer of cash to cards. I can't see where the efficiency of card use comes in on its own.
Q. Is your evidence then that the MIT-MIF does not need to take any account of online transactions?
A. If you come back up to the point of what is the benefit, if you can't see the benefit according to 101.3 then you don't need to measure it.

Q. So your evidence is MIT MIF does not need to take any account of online transactions?
A. That is my evidence, sir.
Q. Can we go to E3.14, tab 266. This is the Rysman and Wright article. If we can go to 5736, pick the first paragraph up from the bottom, where it says:
"Future work might consider ..."
Do you have that?
A. Yes.
Q. It says:
"Future work might consider a broader range of possible ...(Reading to the words)... case of internet transactions, in case these make use of only payment cards and no other payment instruments."
So Rysman and Wright believe that further work is necessary in order to take account of online transactions, correct?
A. They do, they don't consider that in the context of 101.3.
Q. The Commission's 2015 survey doesn't take any account of online transactions, does it?
A. That's true.
Q. Amex is a closed platform, isn't it?
A. Yes.
Q. Looking, again, at what we have just been looking at,

the Rysman and Wright at 5376, in the section I just read out they said, in relation to future work that might be necessary:
"For instance, existing theory does not cover the case in which the relevant alternative to the open platform cards is closed platform cards."
They think that further work is necessary to take account of closed platform cards such as Amex, correct?
A. They believe that.
Q. The Commission's 2015 survey doesn't take account of Amex where it is a relevant alternative to open platform cards, does it?
A. It doesn't. I can't talk about the Deloitte or the Commission but, in my view, again, there is no efficiency benefit.
Q. Your analysis doesn't take any account of Amex where it is a relevant alternative to an open platform cards, does it?
A. That's true.
Q. Can we go to your first report, D2, tab 2, at page 263. Paragraph 707, you say:
"For face to face payments, the most appropriate comparator to card payments is cash."
Do you say that is true for both face-to-face debit and credit card purchasers?

A. Yes.
Q. Can we go to Dr Niels' first report, that's D3, tab 3 at page 335. This is Dr Niels' first report, page 335, paragraph 6.99:
"Cash is a comparator for credit card purchases. In its implementation of the ...(Reading to the words)... credit card purchases."
You just told us that's your approach as well, correct?
A. Yes.
Q. "While cash would be a closer comparator for face-to-face debit card purchases ...(Reading to the words)... funds credit purchases."
That's where you and Dr Niels not for the first time differ, correct?
A. Yes.
Q. Can we go to E3.6, tab 130A. You see that this is the article by Rochet and Wright. You see that on the second page of this.
A. Sorry, I have got the wrong bundle. (Pause) Found it.
Q. Thank you. Again, it is the horribly convoluted numbering. If you turn over the first page, you will see the title. You will see it is an article called "Credit card interchange fees" by Rochet and Wright,

yes?
A. I do.
Q. Then if we can go to point 6. You will see in the middle of the page there is a paragraph that begins:
"In our model, credit cards can be used for two types of transactions: ordinary purchases for regular convenience usage, for which cash or a debit card will soon provide identical benefits and for credit purchases where credit is necessary for purchases to be realised. Credit purchases include a range of different types of purchases such as unplanned purchases, impulse purchases and large purchases for which the consumer does not have the cash or funds immediately available to complete the purchase or for purchases to which the deferment of payment facilities facilitates the transaction. For ordinary purchases we assume credit cards are inefficient given that we assume ...(Reading to the words)... for ordinary purchases."
Then they go on to say:
"Taking into account both types of transactions, a monopoly card network always sets its interchange fee too high in our setting. Thus, regulators ...(Reading to the words)... only likely to give a lower bound of possible interchange fees that maximise consumer surplus."

Now, the view you express in your report is not consistent with Rochet and Wright's view expressed there, is it?
A. That is right for, I think, a good reason, that you are going to ask me.
Q. Well, according to Rochet and Wright, if you accept their analysis, the MIT test that was developed by Rochet and Tirole in 2008 is not suitable for credit cards; that's their view, correct?
A. That's their view. I think Jean Tirole in footnote 13 makes the point, in his paper, that the MIT test has a few problems in terms of competition law.
Q. Can we go to E3.14?
A. Sure.
Q. Tab 265 is the Tirole article, 5696. You will see a heading halfway down the page:
"Subsidise competing means of payment."
A. I do.
Q. Tirole says:
"The analysis assumed that alternative payment methods, cash/cheques, are fairly priced. This, however, need not be the case. In some countries banks are not allowed to charge for the costs they incur on cheques. In this case cheques are subsidised in that their costs are recovered through cross ...(Reading to the words)... cash is then unduly favoured."
What he is doing is identifying that there are social costs of cash and your MIT analysis doesn't take account of those social costs of cash, does it?
A. The MIT analysis consistent with Article 101.3 does not take account of those social costs of cash.
Q. If one accepts Tiroles' analysis it will be likely to be too low.
A. If you view his assumptions as correct then it would be too low.
MR HOSKINS: It is probably a good time to stop, sir, I'm about to move on to a new topic.
A. Sir, may I make just one -- two small points about Rochet and Wright?
MR JUSTICE BARLING: Yes.
A. The existence of a credit card, we establish usually in terms of the restriction on whether you can actually -- it is an objective necessity. When you get to 101.3, a credit card exists, so you have to ask yourselves, what is the benefit that Rochet and Wright are actually thinking about, that the MIF is actually contributing to. If I go to Rochet and Wright's model, you can look through the mathematics but, essentially, it is saying it aids rivalry between retailers.
So using a credit card has some benefit between

retailers. That is an additional sales argument at the retail level but he actually says, explicitly, in his model that there's no global additional sales to the totality of merchants which is our test.

The second thing is that I think even -- I'm not saying even you -- but you have read the mathematics, but you also note that there is no interest in his model. So if, actually, as I have said before interest on the issuer side is greater than the cost, then the additionality of providing that credit is absent.

I was given the homework last night of reading these lovely surveys and I really appreciate it because it brought home to me that we can have as many theories as possible, but ultimately they have got to be grounded in the law. I'm the economist, you are the lawyers, that's the basis.

Q. Before we finish then, is your evidence that you believe your MIT-MIF complies with 101.3, but the logic, the result of everything we have seen so far is that what you are saying is, in order to comply with 101.3, one has to apply a MIT-MIF which Rochet, Tirole and Wright all consider would not be appropriate economically because it would be too low? That's your evidence? That is the impact of it, isn't it?

A. The impact of Rochet Tirole is: I think we ought to

measure transaction benefits. Everything apart from that I do not think is much use in the context of 101.3, where the central issue is actually fair share. That is not a straight economics point because you asked me yesterday: does economics worry about the level? Well, the law worries about the level and that's fair share.

Q. Let's stick to economics because that's your expertise.

A. Indeed.

Q. Your evidence is that you would prefer a MIT-MIF which, according to Rochet, Tirole and Wright, would be too low?

A. Yes.

Q. Thank you.

PROFESSOR JOHN BEATH: Might I ask exactly on that point, because I think this whole line of questioning arose in looking at the final sentence of the Rochet paper, E3.14, page 5696, tab 265.

"The use of this term leads to a conservative estimate of the desirable IF."

I think we should be careful that the word "conservative" is being -- as it seems to be being used is too low. In fact, if you take the range of theoretical results, the word "conservative" means it has not accounted for all the relevant factors. It could be either too low or too high.

MR HOSKINS: Sir, can I respond to this with the legal submissions I made in opening, which is remember here we are in the context of the broad axe.

PROFESSOR JOHN BEATH: Yes.

MR HOSKINS: And the judges have applied the broad axe in the past and recognised the need to favour the defendant rather than the claimant. So when one is looking -- the reason why I'm taking you to all these articles is to show you there is a series of issues, a series of factors that would lead to a higher MIF that are not taken account of. My submission, giving nothing away, at the end in closing is going to be, if you want to apply the broad axe you have to be nice to me and you have got to take account of all these factors that aren't in the MIT-MIF.

PROFESSOR JOHN BEATH: I take the point and I still believe I am correct in my use of the term "conservative" to mean not all factors taken into account. Okay.

MR SMITH: Mr Hoskins, one query that we had. We had some mention earlier today of the introduction of the MasterCard World card in 2008/2009.

MR HOSKINS: Yes.

MR SMITH: It may well be in the documents but, if so, I haven't been able to find it. But did Visa have an equivalent premier card at any time, no need to

answer this now.

MR HOSKINS: No.

MR SMITH: And if it did, can you give us a rough date as to when it was introduced. Thank you.

MR JUSTICE BARLING: Thank you very much. Mr von Hinten Reed, I have already said to you you have to be very careful not to talk about your evidence or the case except in that one respect where you are going to raise it with the team.

A. I appreciate that. Thank you very much, sir.

MR JUSTICE BARLING: Have a good weekend.

A. And you.

MR JUSTICE BARLING: Thank you very much.

(4.31 pm)

(End of open session)

(The court adjourned until 10.30 am on Monday, 22nd February 2016)

INDEX