This Transcript has not been proof read or corrected. It is a working tool for the Tribunal for use in preparing its judgment. It will be placed on the Tribunal Website for readers to see how matters were conducted at the public hearing of these proceedings and is not to be relied on or cited in the context of any other proceedings. The Tribunal's judgment in this matter will be the final and definitive record.
IN THE COMPETITION
APPEAL
TRIBUNAL
Salisbury Square House
8 Salisbury Square
London EC4Y 8AP
(Remote Hearing)
Monday 1 November - Friday 19 November 2021
Before:
The Honourable Mr Justice Marcus Smith
Bridget Lucas QC
Professor David Ulph CBE
(Sitting as a Tribunal in England and Wales)

## BETWEEN:

BGL (Holdings) Limited

## Applicant

v
Competition \& Markets Authority
Respondent

## APPEARANCES

Daniel Beard QC and Alison Berridge (on behalf of BGL)
Marie Demetriou QC. Ben Lask and Michael Armitage (on behalf of the CMA)
$(9.30 \mathrm{am})$
THE PRESIDENT: Ms Demetriou, just a sense check, we are in public, are we not?

MS DEMETRIOU: Yes.
THE PRESIDENT: Good, I would not want us to get that wrong. MS HELEN RALSTON (continued)

Cross-examination by MS DEMETRIOU (continued)
MS DEMETRIOU: Good morning, Ms Ralston.

I think you would agree, would you not, that it is not always possible to carry out an econometric analysis to quantify a suspected anti-competitive effect on price, is it? There may in a particular case not be adequate data available, or it might not be possible to come up with a credible strategy to identify the effect of interest?
A. Yes, I agree, econometric analysis depends on the case.
Q. An obvious point, which I think you would also agree with, is that an agreement may in fact have an adverse effect on competition, including on price competition, even if it were not possible to conduct an econometric analysis to establish or to quantify that price?
A. I can imagine there would be markets where that might be the case.
Q. You would accept, I think, that there is no reason that
you are aware of that a competition authority is somehow prohibited in those circumstances from establishing an infringement by effect. So it would be entitled to conduct some other kind of analysis to prove --
A. Yes, I understand authorities have discretion.
Q. To take a very hypothetical example of a price fixing cartel, let us imagine that all the participants of the price fixing cartel, and let us imagine that the price fixing cartel covered the whole market so we do not get into that area of debate, and let us say that they all submitted -- they are all leniency applicants and they submitted evidence and witness statements to the CMA saying that they had been party to a cartel and that they had agreed not to compete on price and as a result the prices they charged for a particular period of time were higher than the prices they otherwise would have charged.

So the CMA would, I think you would accept, be entitled to place weight on that evidence, would it not, if it were investigating infringement?
A. So I understand cartels such as that would be pursued under an object infringement.
Q. Well, a competition authority can do either. At the moment $I$ am looking at an effects case. So if it was investigating an effects case, the CMA would be entitled
to place weight on that interview evidence, would it not?
A. In situations like that, I think the parties would protest quite a lot if the authority went in the decision to talk about effects if it had not established an effect.
Q. But by establishing an effect the authority would be entitled to place weight on evidence where the participant said: we priced higher because of this cartel.
A. Yes, it could draw -- of course, yes, it could draw on that as evidence.
Q. So what it would be doing in those circumstances is making an inference that the behaviour of the cartelists, as they described it, was likely to have an effect on prices; yes?
A. It is drawing an inference from the statements that that had an effect; yes, that is what the authority would be doing in that situation.
Q. If we go to your report, please, at $\{A / 5 / 33\}$, and if we look at paragraph 3.16, here you say that the CMA has focused on market behaviour rather than market outcomes and not conducted a robust analysis of the available data. I just want to look at the first of your points there.

You accept -- I think you have just accepted that market behaviour is relevant to market outcomes; yes?
A. Yes, market behaviour is relevant to market outcomes.
Q. I think you have accepted that it may be possible to make inferences about market outcomes based on evidence about market behaviour?
A. I said that what you described to me as an authority in making an inference about behaviour from statements, and I also explained that in that situation the parties would likely push back on whether an effect had been established; and we are talking about a hypothetical, so I cannot say where the end would be.
Q. I am only talking about hypotheticals. I put to you a position where there is very clear evidence, statements, in the form of statements, about behaviour, and those statements say: we were party to a price fixing cartel and we priced higher as a result. So those are statements about market behaviour; yes?
A. Yes.
Q. What they did.
A. I am just listening intently.
Q. Yes. What the CMA or an authority would be doing, if it found an infringement by effect on the basis of those statements, is making an inference about likely effects based on the statements about behaviour; yes?
A. Yes.
Q. So you accept, I think, in principle -- I understand that that is a hypothetical and your position in relation to this case is different, but you accept in principle that it may be possible to make findings about market outcomes on the basis of evidence about market behaviour.
A. I am being very careful here because you have used "possible", and that is a very low threshold.
Q. Yes.
A. But $I$ am being very careful because in other cases economists such as myself do query statements as to the effects that have been drawn only from statements --
Q. I know, and I am not trying to trap you into saying something about this case, because I understand your position about this case. I am trying to see whether we can pinpoint the area of dispute. What I am putting to you is that in principle -- so we are not looking at this case or we are not trying to categorise cases, but in principle it is possible to draw conclusions about market outcomes from statements about market behaviour. That is not something which is impossible in all cases.
A. Yes, it is unlikely to be always impossible.
Q. Right. On page $\{A / 5 / 34\}$ at paragraph 3.18 , you say that "changes to the behaviour of market participants may
provide some insight into whether competition has grown stronger or weaker". I think you are saying there it is relevant to market outcomes, and I think you have also accepted that it might be in some cases -- we are talking about hypotheticals -- it might be enough; yes? It all depends on the case, is where we are at.
A. I do not think I say it might be enough. I make --
Q. I thought you did just accept that. I thought you were saying that as a matter of principle it is not impossible that a competition authority might draw a conclusion about likely outcomes on the basis of evidence about market behaviour.
A. So there could be a hypothetical situation which I have not considered where it would not be impossible to rule out an effect -- a likely effect.
Q. I am just asking about --
A. Okay.
Q. -- in principle whether you think that it is always impossible. I am not asking you to look at different ranges of hypothetical situations. I am asking you to agree that it all depends on the case. You cannot say in all cases it is --
A. I do agree it all depends on the case.
Q. Right. If we go to, please, page $\{A / 5 / 105\}$, you have at paragraph 6.2 made a point here. You have said that:
"... when drawing its conclusions about the effects of [the] wide MFNs on the market outcomes ... the CMA refers to probabilities and likelihoods."

You set out two bits from the Decision; yes? The first part, which we can see is Decision -- we can see from the footnote is Decision paragraph 1.13, you say that -- it says this:
"This is likely to have resulted in less differential pricing across PCWs ..."

Now -- sorry, let me finish reading:
"... and consequently higher retail prices than would have been the case absent CTM's network of wide MFNs, to the detriment of consumers using PCWs to purchase their home insurance."

You highlight the word "likely". Is that because you think there is something wrong with that word or that test?
A. No, it was to motivate the bit that I go on to say, that if you are interested in likelihoods and confidence you could draw on econometrics and statistical tests to help put a number on those likelihoods.
Q. Right, so you are not saying that there is anything wrong with the CMA assessing whether market behaviour was likely to have resulted in less differential pricing; you are not making a point about the standard
of proof here?
A. No, I think that is for the lawyers to --
Q. Right, okay, thank you. Then when we see the next bit here, this the next part of the Decision you refer to, so you say -- that says:
"... the reduction of price competition resulting from the presence of CTM's network of wide MFNs was such that negative effects on the level of PCWs' commission fees and the retail prices offered by providers ... in the Relevant Period can be expected with a reasonable degree of probability."

Again, your position is not that the CMA was applying the wrong legal test there. You say that is for the lawyers, that is not for you.
A. That is for the lawyers.
Q. Okay. If we go back to page $A / 5 / 52$ of this report, please -- I am very sorry, it is a wrong reference. I am going to your second report now, so it is $\{A / 9 / 52\}$.

I think this relates to the same passages of the Decision. I just want to tease out a bit more what you say. You say in your first report -- I am looking at the top of the page at paragraph 3.1:
"In my first report, I explained that while the Decision treats CTM's wide MFNs as an infringement by effect and not by object, the CMA nevertheless proceeds
on the basis of an assumption that wide MFNs, by their nature, have anti-competitive effects."

So that is your understanding, is it, of what the CMA has done in this Decision, that it has not analysed effects at all, it has just proceeded on the basis of an assumption?
A. I think when analysing evidence it has proceeded on the basis of the assumption. I do not say that it has not tried to analyse effects at all.
Q. Right, well, let us look at the two bits of the Decision that you focus on. We can see from the footnote at the bottom of the page, 167, that you are referring to two paragraphs. Let us pick up the first of those which is in $\{A / 1 / 17\}$. It is paragraph 1.33 that you refer to. Do you have that?
A. Yes.
Q. That is under the heading "The nature of [the] wide MFNs" and it is talking about what they do contractually, but where in that paragraph do you say the CMA indicates that it is operating on the basis of an assumption that there are anti-competitive effects?
A. I am referring to the contractual -- the idea that the contract prevented the insurers from quoting prices on rival PCWs that were lower.
Q. Right, and so is your point a rather different one? Are
you saying here that the CMA has assumed that the contract was complied with? Because all it is doing is describing the contractual effect of the clauses, as a matter of what they say on their face. So it does not seem to me in this paragraph that they are proceeding on any assumption about anti-competitive effects in the market.
A. So, yes -- so the question was am I referring to the "complied with"?
Q. Yes.
A. That is part of it; and the other part that this paragraph focuses on one way in which the wide MFN could have an effect, which is preventing this undercutting, and, as we discussed yesterday, there are episodes where the alleged enforcement led to lower prices on CTM.
Q. All it is doing is explaining -- this paragraph is a background paragraph which is explaining what the contractual clause is there for. That is all it is doing. Do you see that? It is not making any assumptions about effects at all. That is the remainder of this very lengthy Decision. I am not understanding what point you are making in your report.
A. For the reasons I gave, I think these two paragraphs, when you describe -- this is the only description in the summary of the nature of the wide MFNs, this paragraph
and the one below, and this does not refer to anything about any potential pro-competitive or ambiguous effects. So whilst I have just referred to the first, this whole section of the summary is negative; it is not saying the effects could be non-existent or the effects theoretically could be pro-competitive, it is just saying they could be harmful.
Q. Yes, and if you go to -- so what I am putting to you, to be clear, is that this is a background section which is simply looking at the terms of the clause and describing at a high level what they are there to do, and if we turn on to page $\{A / 1 / 20\}$, this is all in the summary section, you get a whole other heading saying "The anti-competitive effects ..." and "How the CMA has assessed ..." them. So what you have done, can we agree, is alight on one paragraph and misconstrued its importance, have you not, and you have drawn from that a much wider proposition that the CMA has just somehow assumed these have anti-competitive effects without analysing them?
A. No, I think I have explained why I think if you are to start a description of a clause and you call it the nature, and as you say it is portraying this in a factual manner, if $I$ were being balanced I might -I would include something about potential no effects or
potential positive effects; and I see I only reference one of those paragraphs, but the entirety of that section is only referring to harmful effects.
Q. I am saying it does not refer to effects at all, it is looking at the clause on its face; but are you saying that the competition authority should not have looked at what the clause says on its face, it should not have started from that point at all?
A. So in terms of being precise, I have not reviewed all 32 clauses, but some I have reviewed and they refer to prices not being higher on CTM, which is not put here. Again, that would be putting it, in my opinion, more neutrally, because it is not saying: you cannot undercut us on rivals; it is saying: give my customers the best price.
Q. Well, let us look at the next paragraph that you refer to, the second of the two paragraphs, so that is at $\{A / 1 / 414\}$.

You have referred in your footnote to paragraph 11.57. I will just wait for you to find that.

Again, this paragraph is in the penalty section of the Decision; yes?
A. I see, yes.
Q. Where in that paragraph, where does that paragraph show that the CMA proceeded on the basis of an assumption
only as to effects?
If you look at the next paragraph, what you see is there the CMA expressly saying that its finding that CTM's network of wide MFNs had appreciable effects, and --
A. I have -- my point is mainly about the final sentence of 11.57 which draws a comparison to RPM, which is quite a different context -- conduct.
Q. You are not reading this Decision as a whole in picking out these paragraphs, are you? Because this section on penalty comes at the end of the entire analysis on effects, so of course the CMA now is basing its penalty analysis on what it has already found about effect. So again, you have just picked a paragraph out, have you not, and you have used it to support a much wider proposition in your report which is that the CMA has proceeded on the basis of an assumption?
A. I do see this is at the end. Whether this only came to the CMA in its mind when it had finished its analysis or not is not something $I$ can comment on.
Q. Okay. If we go back to your first report, page $\{A / 5 / 109\}$, and I am looking at 6.21 at the bottom of the page:
"Irrespective of the approach used, an empirical analysis of the data looks at actual patterns in the
variables of interest, and avoids relying on individuals to know all the relevant facts at the time and be able to accurately recall these at a later date. This is particularly important in this context given the large number of market participants ... and at least four PCWs. Moreover, as is commonly understood regarding interview evidence, one must always be cautious about the potential for interviewees to answer strategically, especially if they have an interest in the outcome of the investigation."

Yes? That is your view as an expert economist on how you assess evidence?
A. I think you should be cautious in the interviews, and yes, I think that -- and what $I$ am also getting at in the first bit is, with all the best interests in the world, it is difficult to fully understand what is going on.
Q. That is a reason, is it not? So the fact that people might answer strategically -- let us take that at face value -- that is a reason, is it not, in principle to prefer the documents of the companies at the time rather than what they said afterwards; but that is not the approach you took in your effective coverage analysis, is it?
A. You can also have biases in contemporaneous documents;
a junior team member wanting to impress their seniors or cover their backs or something like that. I am not saying we need to dismiss it all, and all I say is you should be cautious and I am sure people have tried to be cautious.
Q. If we go back, please, to 6.13 which is on page $\{A / 5 / 107\}$, you say that:
"Competition authorities, including the CMA, regularly rely on econometrics to estimate the effect of mergers and agreements that may restrict competition by effect."

You say over the page -- you say:
"Regression analysis is also commonly used by economists to quantify damages arising from competition law infringements."

You say:
"In that context, the European Commission noted that 'econometric techniques can increase the degree of accuracy of a damages estimate and may thus help in meeting a higher standard of proof'."

Yes? You refer to the Commission -- the European Commission's practical Guide on quantifying harm in actions for damages. That is what you are footnoting.
A. Correct.
Q. Of course, in damages claims, you agree it is necessary
to quantify the loss that is said to have been caused by an infringement of competition law.
A. Yes, it would be necessary.
Q. That potentially, does it not, engages different considerations to the question of whether an agreement has anti-competitive effect? So establishing infringement and quantifying its effects are two different things.
A. Yes, it is a step further.
Q. You refer to paragraph 92 of the Commission practical guide. Let us look at that. That is at $\{\mathrm{F} / 624 / 32\}$. I think you have referred to paragraph 92, is that right?

If we look at 93, this says:
"Considerations of proportionality may also play an important role, as the gathering of data and their econometric analysis can entail considerable costs ... that may be disproportionate ..."

So you accept that, do you not, in principle, this can be a very expensive exercise?
A. But of course in this case all the data was already gathered by the CMA.
Q. I am asking about in principle.
A. You are asking me in principle whether you could do a damages case without collecting data or --
Q. No, I am asking you, you have relied on a general EC practical guide in quantifying harm. The point you are seeking to make is it might be useful to conduct a regression.
A. Yes.
Q. The simple point $I$ am trying to make is it also might be disproportionate to do it, depending on the case. I am not saying anything about this case.
A. Okay.
Q. I think you would accept, would you not, that even if an econometric analysis might in principle be a robust means of quantifying loss, there is no legal requirement anywhere, there is no black and white, hard-edged requirement, to conduct one if loss can be established in some other way that might be more proportionate?
A. I think that is a legal point.
Q. That is fair. I think that you would agree, would you not, that if a competition authority or a litigant does conduct an econometric analysis, you are not saying, are you, that it is appropriate for them to ignore other relevant evidence in the case? I do not think that is your position, is it?
A. No.
Q. Including qualitative evidence. It is actually very important to look at that evidence, is it not? You need
to take everything into account.
A. Yes, you should not -- you should tell the whole truth.
Q. When you are deciding how to analyse data, you would keep in mind the surrounding evidence that you have, would you not?
A. Yes.
Q. You would also keep in mind that surrounding evidence when you are thinking about the plausibility of your data or of your model?
A. Correct.
Q. I think you would accept that carrying out an econometric analysis will not always identify an adverse effect on competition even if one in fact exists; yes? So if the effect is small or if it is measured with imprecision it might not be picked up by an econometric analysis.
A. I would agree with the former. I would be quite uncertain about that latter. I think it -- I can say possibly there may be a scenario where a true effect was not picked up in one model.
Q. So let me put it this way: if there is a particular practice or agreement that is being scrutinised, and let us say it has a very small effect on price, let us just use some figures, I am not talking about this case, but let us say the effect on price is $0.5 \%$, and let us
say -- then would you accept that in general terms it would be harder reliably to identify that increase than an increase of $50 \%$ ?
A. If there is a larger effect, you are more likely to identify it.
Q. Yes. So for a smaller effect you would need -- for example, you may need a bigger sample or more robust data.
A. Yes, large samples can overcome that lack of precision.
Q. In this case, what you have done is you have conducted regression analyses for relative prices, absolute prices, commissions and promotional deals; yes?
A. Yes.
Q. You know, of course -- I am going to come back to this point -- but you know that the CMA's case is that those analyses are flawed for various reasons, including that they are not robust to spillover bias. I am going to come back to the spillover point a bit later.
A. So that would not apply to the promotional deals.
Q. To the promotions. That is common ground. I want to look for a moment, though, at what your analyses are seeking to do. In each of them -- is this right? -- you adopt a hypothesis, the null hypothesis, and you see whether your results reject the null hypothesis?
A. Correct.
Q. The null hypothesis in each of your regressions is that the wide MFNs had no effect on the relevant parameters of competition, so relevant prices, absolute prices, commissions and promotional deals?
A. Yes.
Q. It is possible in principle, is it not, that when an econometrician is testing a null hypothesis, they do not have to test zero, they could test some other result, could they not? So when you are hypothesis testing you do not have to select no effect, you could select an effect, in principle.
A. The reason people test zero is that has meaning. You come at this with an open mind: is there or is there not an effect? So, yes, technically, you can change that number in your null hypothesis to test a different number, but we take zero because it is important; it means there is no effect, and you want to rule out there being no effect.
Q. This is right, is it not -- I am going to now summarise at a very high level how you have gone about things. I hope it is accurate. It is not intended to be controversial, but if $I$ have something wrong, obviously do say.

It is possible to identify the following stages in your analyses. First, you work out the coefficient of
what you call the wide MFN indicator. So we are looking at the extent to which the removal of the wide MFNs has an effect on the dependent variable which will be relative prices, absolute prices, commissions and promotional deals; yes? Then secondly -- I will say both bits and then you can tell me if $I$ am wrong; it is a summary -- you work out whether the coefficient is statistically significant. So that is a measure of how confident you can be that the effect you have observed really is attributable to the wide MFNs rather than to other factors or noise in the market.

Maybe we should take it from your report rather than my attempted summary. Let us go to $\{A / 5 / 110\}$.
A. Yes, that is where $I$ explain that.
Q. If we look at 6.23 and 6.24, I was intending to summarise the first stage there at 6.23. So what you are doing is you work out the coefficient of the wide MFN indicator; yes?
A. Yes, so you develop a model, we call it a model, to try and explain the dependent variable, which we have run through as four measures, two of pricing, commissions and promotions; and the model thinks about other things that might affect them, but of interest in this case is whether the wide MFN influenced relative prices, commissions or promotions.

As explained, you have other variables. So in 6.23 and 6.24 I explain how other variables capture other things going on, and $I$ have reported there is a measure of how well your models capture everything going on. Mine are for relative price and absolute price of 65 to 80\%, so that is quite good, actually -- no, I have not covered everything -- and for commissions it is about $59 / 60 \%$.

Then you then see -- as Ms Demetriou explained -whether the wide MFN has a causal effect on the dependent variable by looking at that coefficient, and then whether that coefficient is statistically significant, ie you can rule out that you have observed the coefficient by chance. That is the way economists would describe the statistical test.
Q. Thank you. If we look at page $\{A / 5 / 111\}$, that is what you are saying there, is it not, 6.25, just to establish that?
A. Yes, that is the wording.
Q. In each of your analyses you have evaluated statistical significance by computing the p-values of the estimated coefficients, have you not?
A. Yes.
Q. P-values measure the probability of observing a result that is at least as large as the observed coefficient
when in fact the true value is zero. That is correct, is it not?
A. Yes, which in more -- when the true value is zero in this case would mean no effect.
Q. Yes, and the reason that you are using zero is because zero is the null hypothesis that you are testing; yes?
A. Yes, which is important, because then there is no effect.
Q. Yes, I understand that that is what you say. In your analyses, you take a p-value of 0.05 to be the threshold for statistical significance, do you not? That means, just to paraphrase it, that there is a $5 \%$ chance of obtaining at least the estimated coefficient when in reality it is equal to zero.
A. Yes.
Q. What this means is -- if we look at -- or perhaps I can just say it, because $I$ do not think it is controversial. That means that if the results of your regressions have p values of more than 0.05 you regard those results as not being statistically significant.
A. Correct, yes.
Q. In other words, whenever the p-values of a given regression result are more than 0.05 , this means that you will not reject your null hypothesis that the effects of the wide MFNs was zero, that there were no
effects.
A. That is the rule I have applied. Since the discussion about precision $I$ have looked at my main results and the p-values -- and this is in the joint statement -- are all above 50\%, so --
Q. I am just at the moment -- we will come to that, but at the moment $I$ am just trying to --
A. Yes, the standard approach which I adopted was can you rule out applying the $95 \%$ or the $5 \%$ test, as Ms Demetriou is referring to.
Q. Yes, so what you are saying is: if it is not statistically significant, then I cannot reject the null hypothesis of zero. That is how it works.
A. That is how it works, yes.
Q. Let us look at an example of how you approached statistical significance in your report. I want to look at the promotional deals analysis, because we looked at the non-regression bits of promotional deals yesterday. If we go to page $\{A / 5 / 180\}$, if we look at paragraph 9.92, you say that you have assessed whether there is evidence that the disapplication of CTM's wide MFNs had a statistically significant effect on the prevalence of promotional deals and the agreed retail price discount associated with them, and in doing so you considered two analyses; yes?
A. Yes.
Q. The two analyses are promotional deals engaged in by the covered HIPs only and then the second one is all promotional deals; yes?
A. Yes.
Q. So covered and non-covered.

MS DEMETRIOU: Then if we go over the page and look at the table on 9.4, this summarised your results, does it not, and if we look at the first row -- sir, can $I$ just pause because I have had a discussion with Mr Beard and with my clients. These figures are all in yellow. Now, the oddity is -- I think they are in yellow not because the figures are confidential in themselves but because the underlying data which gave rise to them are confidential; so the inputs into the models are confidential, and that is the only reason why the results are highlighted.

The oddity is that some of these reports are referred to in Professor Baker's report and they are not redacted in his report. Now I cannot see, and Mr Beard agrees, any reason why $I$ should not refer to the figures, because I do not think anyone in the world could reverse engineer the process.

THE PRESIDENT: I was about to say that it was implying a degree of mathematical ability.

MR BEARD: We think that what happened with the redactions was, as Ms Demetriou fairly says, that when Oxera are generating data that relies on confidential material, because they do not then work out the extent to which you could reverse engineer it all gets blanked out, and numbers particularly can be sensitive so they are blanked out. Ms Demetriou asked about this. We do not have any concerns about the confidentiality in relation to --

MS DEMETRIOU: Thank you. I was going to try to do it without referring to them, but $I$ just think it might be difficult for everyone, so $I$ am grateful that we have agreement.

THE PRESIDENT: You are quite right, and we will deem this table unyellowed.

MS DEMETRIOU: Thank you.
So going back to the table -- and sorry for the interjection.
A. That is all right.
Q. The first substantive row, it says, "Wide MFN (0 before, 1 after the removal of wide MFNs)", that contains coefficients, does it not, showing the relationship between the removal of a wide MFN and the number of promotional deals both for the whole market and the covered HIPs and then the retail prices associated --
the associated retail price discounts; yes? That is what it is doing.
A. Correct, yes.
Q. If we take the estimated coefficient of 0.257 -- so the first one -- this means that in your sample, following disapplication of the wide MFNs, the number of promotional deals per month increased by 0.257 across the whole market, controlling for the number of promotional deals in the previous month. That is correct, is it not?
A. Yes.
Q. The figure of 0.076 in your column 2 means that when the sample is narrowed down to just covered HIPs, the number of promotional deals was 0.076 higher after disapplication of the wide MFNs, again controlling for the number of promotional deals in the previous month?
A. Yes, that is the point estimate.
Q. That is the point estimate. So again, I hope in a way that is helpful -- I know that this is bread and butter for you, Ms Ralston, but there may be at least some in the room for which it is not glaringly obvious, so I am just at the moment establishing what you have done -the coefficients in 3 and 4 indicate that in your sample the removal of the wide MFNs was associated with an increase in the value, in pounds, of the discounts
offered, again for the whole market you see 4.190 and then the figure, the other figure, is for the covered HIPs; yes?
A. Yes, that is effectively the average.
Q. Yes. The important point, as you see it, is that even though these results show increases which might be thought to be consistent with the CMA's case, you say that they are not -- you found that they are not statistically significant, because if they were what you would see in the table is either one or two asterisks; is that right? That is how you would signify --
A. I signify, yes, the significance with asterisks.
Q. So if we go back to -- sorry, if we go on to page $\{A / 5 / 182\}$ of your report, at 9.99 at the bottom of the page, your concluding sentence you say:
"Finally, my econometric analysis, which offers a robust means to disentangle the effects of CTM's wide MFNs from other factors, shows no evidence that the disapplication of CTM's wide MFNs had a significant effect on the prevalence of promotional deals or the agreed retail price discount associated with them."

To be clear about what you are saying there, you are not saying, are you -- I do not think you have said this anywhere -- that your regression results prove that the removal of the wide MFNs had no effect on the number or
value of promotional deals in the market? That is not your case.
A. No, my case is -- or my results are that there is no evidence of an effect.
Q. But you are not showing that your results demonstrate that there was no effect?
A. No, I am yet to find -- I am not sure someone knows how to prove no effect.
Q. Right, but in fact the results of your analysis indicate that in your sample the removal of the wide MFNs was associated with an increase in the number and value of promotional deals; but you rely on the inference that if the true value was zero, so if there were no effect, there would be a material possibility of observing that increase that you measure; yes? That is your point.
A. No, I would not say -- the point of statistical testing is to say whether you can establish a causal relationship between the key explanatory variable here, the wide MFN, and the dependent variable here, promotion. So this analysis does not establish a causal relationship between the two.
Q. I am just trying at the moment to establish how it works. On its face, it looks like it establishes that there is an increase in promotional deals because your coefficients are positive; yes? But what you are saying
is that you are relying on the lack of statistical significance of those coefficients. So you are saying that there is a material possibility that you observe these increases even though in fact the true value is zero; yes? That is how it works.
A. As I said, the p-values are over $50 \%$.
Q. I understand, we are going to come back to that.
A. So that is why it does not establish, as you are saying -- you are saying it establishes that there was an increase, and I disagree.
Q. I am not saying that. I am asking a more modest question at the moment which is: on their face, this shows an increase. I am not saying anything about that establishing at the moment. On their face, this shows an increase; yes?
A. The numbers are positive, yes.
Q. The numbers are positive, which is consistent with an increase.
A. Yes.
Q. Right. The reason why you are saying that does not establish an increase is because those numbers are not statistically significant?
A. Yes, this is the benefit of econometrics, it gives you a consistent yardstick to help you understand when something is more than just by chance.
Q. Is this right: it follows that your regressions do not reject the null hypothesis of zero; yes?
A. That is correct, yes.
Q. But they also do not reject the possibility that the wide MFNs did have an effect; yes?
A. Yes, there is the bell curves, which show the range of possible values.
Q. Yes. I am going to come on to the bell curve, but let us look at the joint expert statement. So if we go to $\{A / 12 / 36\}$ at $G .1$, if we look at the last paragraph, you say there:
"... Professor Baker is incorrect to state that my results do not discriminate between the possibility of no effect and an economically significant effect in this case. The most reasonable inference on the basis of the data is [to show that] there was no effect."

Yes? So you say that was the most reasonable inference to make.
A. Yes.
Q. I want to explore that a little bit, again taking your promotional deals analysis as an example.

If we go to your second report, please, $\{A / 9 / 137\}$, you explain here at 5.91 that when you are doing a regression analysis you can construct a confidence interval estimate for any parameter; yes?
A. Yes, that is correct.
Q. As you say here, a confidence interval of $95 \%$ means, does it not, that there is a 95\% probability that the true value of the parameter that you are looking at falls between the lower and upper bounds of that confidence interval?
A. Correct, yes.
Q. Really, if $I$ can put it this way, that is just the other side of the coin of your $5 \%$ threshold, is it not, for statistical significance?
A. Yes.
Q. So to make this a little bit easier to picture it, we have your bell curve that you just referred to, so let us have a look at that. That is on page $\{A / 9 / 140\}$.

Again, this relates to your promotional deal analyses -- both analyses, does it not?
A. Yes.
Q. In fact $I$ think it relates to your all HIPs. If I look at the note, $I$ think it relates to the all HIPs one, does it not?
A. Yes.
Q. What we see in the middle is the figure of 0.26 . Just to explain that, that corresponds -- that is a rounding of the figure of 0.257 that we saw a minute ago, was it not?
A. Yes.
Q. You call this figure, I think -- one of you calls it the central estimate and one of you calls it the point estimate, but basically it is the same thing?
A. Yes.
Q. You then see this bell-shaped curve, as you say, and that ranges from minus 0.98 on the left-hand side and 1.49 on the right-hand side.
A. Yes.
Q. The values between that lower and that upper bound reflect the $95 \%$ confidence interval around the point estimate of 0.26 , as you have described in your report.
A. Yes.
Q. What that means is that you cannot reject, can you, any of the values within that $95 \%$ confidence interval using the 5\% significance threshold that you have used throughout your analysis, you cannot reject them?
A. I agree.
Q. What you do say is within that $95 \%$ confidence interval we can assign probabilities to different values; yes?
A. Yes, which is the shape of the bell curve.
Q. Which is the shape of the bell curve. So what you are saying is that the most likely value is at the top of the bell curve; yes? That is your central estimate of 0.26 .
A. Yes, that is the most likely, but still you cannot be too confident on it because you cannot reject that it is -- because, as you can see in the chart, zero is very close to it, which is why you cannot be sure, you cannot reject that there is no effect. If you go to the extremes of the bell curves, so the numbers that Professor Baker refers to, I think the chart -- I use this chart to say he is taking the outer limit --
Q. Yes, well, let us --
A. -- which are the least likely.

MR BEARD: Would you let the witness finish. Thank you. MS DEMETRIOU: I am going to go on to a question on that point which $I$ think might take you through it.

THE PRESIDENT: Pausing there, though, when one is looking at this sort of data, ought one to be interested in the range rather than the point, in the sense that if the range between the two ends of your curve where you have excluded the -- have you excluded $2.5 \%$ on either side?
A. Exactly, yes.

THE PRESIDENT: So excluding those outliers, if the range of 95\% probability is tight, that is quite significant, whereas if it is very broad, then that suggests that actually your analysis is -- I do not want to say less reliable, because you are being entirely upfront in the way it works, but less helpful for a court to consider
what they can draw from the data.
A. So I would say a couple of things. I would firstly say that certainty of numbers or of conclusions is a challenge for all types of evidence, and I see it as a merit with econometrics that you can understand how you interpret the data and you can see the range. So you know this imprecision, you can put numbers on it, and that can help frame your mind.

Then when we get to talking about tight and wide ranges, then we move into the world of judgment calls about what is tight and what is large. So I would say, in my view, that that is quite a tight range around 0, so I would actually say that this is quite a precise estimate that the average effect is zero.

Others may draw different conclusions, so it is for perhaps yourselves to decide what you make of it, but this is -- one of the merits which I put my report of econometrics is sort of the standards and the conventions, and it allows us to be quite neutral and say look people typically take a 95\%, they feel comfortable with that approach and they feel comfortable, you know, it has sort of been established that if it is statistically insignificant you cannot rule out that there is no effect. We are testing the limits of that here, but $I$ see that as a very valuable
thing, that I have not made it up, I have not come to a case and had to make that up. That is a decision rule that has been accepted before me.

THE PRESIDENT: I understand. I suppose what I am suggesting, I think you are agreeing, is that if your bell curve showed that the -- here we are talking about --
A. This bell curve shows that, as you said, there is $2.5 \%$ either side, so the range above one and a half promotional deals for all insurers in the market is -that is the $2.5 \%$, so that is a very small probability, whereas we have $95 \%$ within that range of actually a decrease that the wide -- or, you know, a fall of 1 or an increase of 1.5 , pretty central around 0. So I feel that this is quite strong evidence that overall there was no evidence of an effect.

THE PRESIDENT: Yes, I suppose what $I$ am saying is if you were showing the end points of your 95\% bell curve --
A. We do show the end points of the bell curve. Sorry, I have not --

THE PRESIDENT: No, I am not criticising you. I understand why you exclude the outliers. What I am saying is if the range shown in this diagram showed minus 5 promotions on one side and plus 5 on the other side, that would be such a broad range that it would not
really help us very much; but what you are saying is that there is a tightness between the nearly minus 1 and nearly plus 1.5 which gives us a degree of confidence about the -- well, using the point of 0.26 , because the variation around that is so tight, it is something which we can place more weight on rather than less. I think that is what I am trying to say.
A. Yes, that is what $I$ was explaining.

THE PRESIDENT: Yes. Equally, if you had a curve which as it were shifted along the $X$ axis so that you did not actually have any probability of a reduction in promotional deals, ie you did not have the minus 0.98 but you actually had a plus 0.98 and going to a plus something else, that itself would be also something that would be --
A. That would be the first test of, if zero was not in the curve, then $I$ could not not reject the null hypothesis. I would say there is evidence of an effect, but zero is within the curve.

THE PRESIDENT: I understand. Thank you. That has been very helpful, for me at least.

PROF ULPH: Could I just ask a question at this point, please?

THE PRESIDENT: Of course, Professor.

PROF ULPH: Ms Ralston, am I correct in saying that one of
the factors that will determine just how wide this curve is is the number of data points you have in your sample? So if you had a larger sample, you would tend to get a much narrower curve. So what is going on here is to some extent a reflection of the number of data points you had in your sample. Am I correct in that?
A. Absolutely, and so this approach for promotions, which we have talked about how frequent or not so frequent they are, you would expect to get less precision for promotions because there is a handful of them. That is why in this analysis $I$ take the longer time period that the CMA prefers just to have as much data as possible, even though my case is you should focus on the event, time close to the event.

PROF ULPH: Thank you.

MS DEMETRIOU: Thank you, sir.

Was there anything else the Tribunal --

THE PRESIDENT: No. I am done, thank you.

MS DEMETRIOU: That was very helpful.

So, Ms Ralston, I just want to look at the
1.49 figure. I appreciate your case is that this is not very likely, so I understand that, but I just want to place it into some context. Can we turn to Professor Baker's report at $\{A / 7 / 47\}$.

What he has done here, you see in the second
column -- I am looking at the third row down that says "All HIPs", so the second main row down in the table. He has taken your point estimate in the first column, then you see the confidence interval, yes, in the next column?
A. Yes.
Q. Then you see the --
A. The average.
Q. The average, exactly. Thank you.
A. Yes.
Q. So you see the average before the wide MFNs were removed, and then what he is doing in the final column is showing that the 1.49 corresponds to a $27.4 \%$ increase in the number of promotional deals compared with the average monthly number of promotional deals before the wide MFNs were removed.
A. Yes, so each of the final column is taking the outer limit of the confidence interval and dividing it by the average for the variable before the removal, yes.
Q. Thank you. I know that you say that is the outer limit and it is not very likely, but can I just establish that you do not disagree with the maths?
A. No, I believe he calculated them all correctly.
Q. So you accept that if we take that outer limit, then what that outer limit shows is that the removal of the
wide MFNs is associated with $27.4 \%$ more promotional activity after removal?
A. Yes, and I talk about how I would place less weight on percentage increases of small numbers, because if you divide by a small number you always get a larger increase.
Q. Yes. But you do not dispute --
A. I do not dispute the calculations, no.
Q. You make the point that it is considerably more likely that the true value of the coefficient is zero than this outer upper bound; yes?
A. Yes.
Q. You say, I think, in your report, your second report, that in fact the -- well, let us turn that up so we can see it. It is at $\{A / 9 / 140\}$. It is the final sentence of 5.102. You say that the true value is seven times more likely to be zero than that upper bound; yes?
A. Yes, because it is seven times the height of the --
Q. Yes, but I think you also accept that the point estimate of 0.26 is more likely to be the true value than zero; yes?
A. Yes.
Q. Higher up on your bell curve. So you accept, then, that is more likely that the removal of the WMFNs caused an increase of 0.26 per month than that the removal had no
effect?
A. No, I would say that because it is statistically
insignificant there is no effect. I am saying that 0.26
is higher than the outer limit of the confidence interval of 1.49. Equally, it is higher -- it is more likely than minus -- you know, a fall of 1.
Q. I thought that you say that -- if we look at 5.102 on page $\{A / 9 / 140\}$, you are saying that the mass -- let me just see if $I$ have understood you:
"... the mass of the probability density lies in the central area of the diagram and the most likely value is the central estimate, which lies at the peak ... As the confidence interval deviates further from the central value, the probability that the 'true' parameter is captured at that point of the interval decreases."

Yes? So I think what you are saying, I think what that means is that the most likely result is 0.26 , and any other result either way is less likely.
A. Yes, I do, with that approach. I just feel very hesitant to place weight on insignificant coefficients, especially this one which is so close to zero.
Q. Okay, let us look at where the coefficient of zero is on the bell curve, then. If we imagine -- I know that you know that Professor Baker has done this, I am going to take you to where he has done this in a minute, but if
you imagine drawing a horizontal line from the top -from the part of the bell curve at the top which is represented by zero, and if you draw a horizontal line across, so you cross over the point estimate and come to another place towards the top of the bell curve -- are you with me?
A. Yes.
Q. -- then, and I do not know if you have seen that

Professor Baker -- let us turn this up. This is at \{F/720/2\}. If we look at paragraph 6 -- have you looked at that before? Have you seen it?
A. I think that was in the rejected report, the curve you are referring to.
Q. Yes, that is the rejected report we applied for permission to put in, and you have seen that.

What he has done is he has drawn that line, and where you end up is a coefficient value of 0.51. I do not think you dispute that figure, do you, or have you not looked at it?
A. I think I saw the chart. I am not too close to that 0.51.
Q. If we look at --

THE PRESIDENT: How does he get a coefficient value of 0.51 ?
MS DEMETRIOU: I am sorry, sir. Do you have the bell curve in front of you? If we go back to $\{A / 9 / 140\}$, do you see
the first dotted line, which is on zero, which goes --
THE PRESIDENT: Yes, I see that.

MS DEMETRIOU: It goes near the top of the slope, but not at the top.

THE PRESIDENT: Yes.
MS DEMETRIOU: If you draw a horizontal line parallel with the $X$ axis from that to the other side of the bell curve, crossing the point estimate dotted line -- are you with me?

THE PRESIDENT: Oh, I see, yes.
MS DEMETRIOU: -- then where you end up is a value of 0.51 . That is what Professor Baker has calculated.

THE PRESIDENT: But you would not have 95\% of all outcomes falling within that curve.

MS DEMETRIOU: No, I am not making -- we are still within the $95 \%$ confidence interval. I am just hypothesising a different point on the curve.

THE PRESIDENT: Yes, but what you are doing, I think, is taking a fraction of the bell curve and --

MS DEMETRIOU: Sir, it may be I can put my question and then you will see what $I$ am doing.

THE PRESIDENT: I am sorry.
MS DEMETRIOU: This 0.51 figure corresponds in percentage terms to a 9.4\% increase in promotional deals. The point $I$ am putting to you is that that figure, on your
methodology, is just as likely as zero, is it not? Because it is the same distance away from the most likely estimate to zero, so it is just as likely as zero.
A. So we say that the probability I observed the coefficient based on the data -- I had observed the data given a true effect of 0.51 is as likely as there being --
Q. No effect.
A. -- no effect. Yes. You cannot -- because it is in the confidence interval I cannot rule it out, and it is the same height.
Q. Yes, so in the same way -- let me put it this way -that your results do not allow you to reject the hypothesis that the effect of the wide MFN was zero, it does not allow you to reject the hypothesis that it is 0.51 , and in fact those results are equally likely, on your analysis.
A. The strength of the no effect, which you would not get with the 0.51 , is the fact that $I$ have done very full separate models, which $I$ think is important context.
Q. Right.
A. I am not saying that -- my overall conclusion as I generally put at the end of each section is consistent with a wider market, consistent with my assessment of
coverage and consistent with all my econometric models of finding that $I$ cannot reject no effect. I conclude that there is no appreciable adverse effect. So that is why I am saying, you know, if you thought there was a prior of an effect of something, you could run that test through all your models, and you could try and see whether you can establish that or not.

So that is why I am more confident that there is no effect, even on this statistical test we are saying, I agree it is equally likely on this particular statistical test, but my report is not just one statistical test; it is multiple. So by looking at the question in many ways, $I$ can be more confident that I have not rejected a true effect, I have not missed something.
Q. I think what you are saying is that you accept that it is equally likely on this regression to be 0.51 as zero, but what you have to do is take a view based on all the evidence available to you.
A. Yes.
Q. That includes your other regressions, and it also, as you say, includes the effective coverage analysis that you have done, and of course it includes all the qualitative evidence that the CMA has looked at in this case. So you have to take a view in the round, do you
not, as to what is most plausible? That is where we end up, is it not?
A. Yes.
Q. I am not going to go through all of your regression results in relation to these points because I wanted to establish the principle, and I think that there is a lot of common ground in terms of how this operates, but I do want to look, please, at $\{A / 5 / 5\}$.

At $\{A / 5 / 5\}$ paragraph 1.17 , your conclusion is here. You say -- I think this really summarises what you have just said. You say you find no evidence that CTM's wide MFNs had a statistically significant effect on retail prices, or commissions or on promotional deals; consistent with your finding that the relevant market in which it competes is wider, so that is a facet of -that is something you take into account in assessing the plausibility of these results and what is more likely than others, and with your finding that coverage is more limited, that is your effective coverage analysis; yes?
A. Yes.
Q. You have seen in Professor Baker's report, I think, that he has put together various tables relating to the precision of each of your econometric analyses. I just want to show you those, I know you have seen them, but if we go to $\{A / 7 / 45\}$ and table 6, for example. This
relates to the precision of your relative price analysis. We see that at the top in the heading.
A. Yes.
Q. You will see that he sets out the point estimates for the weighted analysis, the unweighted analysis, and so on.
A. Yes.
Q. He has worked out the $95 \%$ confidence interval, yes, in the next column?
A. Yes, he has done that. He has always taken one side of the confidence interval, which is interesting.
Q. What do you mean --
A. He only takes the upper limit.
Q. I see.
A. He does not say -- you know, the analysis also does not rule out that the wide MFNs have dramatically pro-competitive effects. If you were to take the lower bound of the range, you would find that the wide MFN would have resulted in potentially positive effects. That is all I am making there.
Q. I see. So you are not quibbling with column 3, that is correct, so the confidence interval where he has shown the lower bound there, but what you are saying is that in his last column he has shown the percentage increase based on the upper bound.
A. Yes.
Q. Okay. If we look along the row that begins "Weighted", this relates to your regression, does it not, where you have looked at the relative proportion of risks priced more expensively on CTM than other PCWs, weighted by reference to the PCW'' shares of overall sales; yes?
A. Yes, so it is more weight to MoneySupermarket's result in that one.
Q. I am sorry?
A. More weight to the effect relative to MoneySupermarket, because I take account of the respective PCWs' market share on MoneySupermarket being bigger than GoCompare and Confused, whereas the unweighted is basically just a simple average, at each moment in time rather than at the end of the result, of the specific approach for MoneySupermarket, GoCompare and Confused.

I thought quite hard which is more important, weighted or unweighted, and I could not decide, so I report both, because I am not sure what is more important, if an effect on a market is on a smaller player or a larger player. So I think you might -- if you count people or institutions the same, you would put more weight -- sorry, more emphasis on the unweighted result. If you think it is more important what happens to larger players, you would put more emphasis on the
weighted result. Thank you.
Q. Thank you, that is helpful. So, as you say, in relation to the weighted result you are taking account of the fact that MoneySupermarket is an important rival.
A. The largest share.
Q. The largest. Then if we look at the point estimate of 0.027, that is the coefficient that would be at the top of your bell curve if you were to represent it in that way.
A. Yes, correct.
Q. What that means in real terms is that for your sample the removal of the wide MFNs is associated with a 2.7 percentage point increase in the proportion of risks priced more expensively on CTM, does it not?
A. Yes, that is the central estimate, yes.
Q. Yes, the central estimate. I think you say that -- you say it is reasonable to consider that this is small; so even though it is positive, you say it is reasonable to consider that it is small. I am going to come -- as I say, I do not want to get into this debate now on spillovers, we will come to it, but can we just agree that if there were spillover effects then the 0.027 would be an underestimate of the effects? So if there were --
A. So my primary position is that you cannot reject that
there is no effect. So I was careful, I thought, to always say, when referring to these coefficients, that this is a statistically insignificant result.
Q. I understand.
A. But we got into the discussion about what is a large or small number, and yes, my view is 2.7 is a small number.
Q. Then my question was: let us assume -- and I appreciate your position on this; we are going to come to it -there were spillover effects, then this number would underestimate the true effect, would it not? So you would not see 0.027 , you would see something higher.
A. Yes, the effect on the spillover would -- you know, I am calculating the difference between non -- difference between formerly covered insurers and covered insurers, so if the covered insurers bumped up, then I am calculating the difference. So whether you say -- it is the difference between the two. That is why I am being hesitant.

THE PRESIDENT: Just so that I am absolutely clear about what you understand by spillover effects, this is the fact that the removal of wide most-favoured-nation clauses has a sort of -- there is a stickiness to the practice in the market regarding pricing promotions.
A. I think Ms Demetriou was referring to spillover to non-covered insurers.

THE PRESIDENT: Right.
MS DEMETRIOU: Sir, if it is helpful, $I$ am going to have a separate -- I am going to deal with this separately and $I$ am going to take it in stages, and it may be better to -- I would prefer, I think, to leave that discussion.

THE PRESIDENT: That is fine. It is just you are asking a lot of questions about spillover effects, and I want to be absolutely clear what it is you are describing. MS DEMETRIOU: That is fair, sir. I am going to abandon that question now and come back to it. I just think it may be more logical to consider it.

THE PRESIDENT: That is absolutely fine. I just want to make sure $I$ am understanding the answer.

MR BEARD: Of course. Can $I$ just check, just out of fairness for the witness, when you were referring to -when Ms Demetriou was referring to spillovers then, was Ms Ralston correctly understanding what you were referring to, never mind the further discussion?

MS DEMETRIOU: I think she was. I think we are on the same page in terms of spillovers, but --

MR BEARD: I just wanted to make sure, in case there was some correction needed.

THE PRESIDENT: We are just behind.
MS DEMETRIOU: I think Ms Ralston and I are on the same
page, but $I$ would prefer to leave spillovers, please, because I think $I$ can deal with it more efficiently in one go, so I am going to withdraw my question.

MR BEARD: That is fine. It was just whether or not anything needed correcting, but it sounds like --

THE PRESIDENT: I will withdraw my query on that basis. MR BEARD: It is fine. I think we will leave Ms Demetriou and Ms Ralston on that same page. I think there were many other pages where they may not be quite there. MS DEMETRIOU: Again, Ms Ralston -- this is of course the upper bound, but in relation to the percentage figures in the last column, you are not disputing the maths, are you?
A. No.
Q. In terms of the other tables that Professor Baker has produced, so if we go on to page $\{A / 7 / 47\}$ we have looked at this already, but $I$ think you have said you do not dispute the maths there; and if we look at page \{A/7/50\}, this is commissions, again he has done the same exercise in looking at the upper bound, and I know what you have said about the upper bound being unlikely but you do not dispute the figures? That is all I am asking you.
A. Could I say, I mean I have not verified them, but you are correct to say that $I$ am not proposing an
alternative number.
Q. Your position is the same in relation to page $\{\mathrm{A} / 7 / 51\}$, table 9?
A. Well, yes, I did not go through all his calculations, but, yes, so I have not presented a different number.
Q. Looking at this table, this is your absolute price specification. This is Professor Baker's -- sorry, one second. (Pause)

If we go back, please, to table 6 \{A/7/45\}. I was on your absolute price specification; this is your relative price specification on page $\{A / 7 / 45\}$, and if we look at the row -- do you have that? Sorry, have I confused matters?
A. I do, yes.
Q. It is there, okay, thank you.

If we look at the row beginning "MoneySupermarket", do you see three from the bottom?
A. Yes, I see that.
Q. This looks at the proportion of risks priced more expensively on MoneySupermarket than on CTM, does it not, MoneySupermarket being the biggest -- numerically the biggest rival to CTM?
A. Yes.
Q. It shows a point estimate of 0.09 ; yes?
A. Yes.
Q. This means that if you go along the table the mean dependent variable, 0.256 , increased to 0.346 ; yes?
A. Yes.
Q. So adding 0.09.
A. Yes. That is $26--$ well, $25.5 \%$, so the mean dependent variable. So on average, before the wide MFN was removed, wide MFN insurers were pricing $25.5 \%$ of their risks more expensively on ComparetheMarket relative to MoneySupermarket.
Q. Thank you. That went up to -- on your mean -- that is a much more helpful way of looking at it.
A. Yes.
Q. So on your mean --
A. So 25 went up to 34 .
Q. Went up to 34 , exactly. Yes, exactly. If we go back to your table, let us go back to your table at $\{A / 5 / 251\}$, table 5.4, you see the entry for MoneySupermarket there, do you not, so the coefficient of 0.094 and it has been rounded in Professor Baker's table to 0.09?
A. Yes.
Q. Underneath it in brackets is the figure of 0.0543 , which is the p-value; yes?
A. That is correct.
Q. That is only a fraction --
A. That is a one-sided p-value.
Q. Right. Are you saying it is not appropriate to have a one-sided p-value here?
A. No, I am just saying that relative to the other tests this is imposing a more stringent -- so when we had the bell curve, the Chair correctly referred to 2.5\% either side. With the relative pricing analysis I had an a priori as to the effect, it would be in one direction, so to be conservative I took a one-sided test, which put all that $5 \%$ on the one side. So you could double that number to get back to the two-sided which is the standard approach to statistical testing.
Q. But on the test that you have --
A. Yes, I am just explaining why it is not apples for apples which we like to be sure on.
Q. I understand. On the test that you have selected, it is nearly statistically significant to the 5\% level and it certainly is statistically significant if you instead use a 10\% threshold; yes?
A. Yes.
Q. That is, on your own account, a result that you would have some confidence in?
A. No. This specific thing is about MoneySupermarket. So when I am testing the effect of the wide MFNs I am looking at the effect on all PCWs, because otherwise we are talking about there being noise in the market and
unable to control for everything, and what we have also heard is that MoneySupermarket had a big best price strategy that started in 2017. So it is difficult to disentangle other things going on that might be MoneySupermarket -- sorry, we are in public, are we allowed to talk about this?
Q. I think we have all been working on the basis that we are -- that is a fair point.

THE PRESIDENT: I think that given the generality with which we are speaking ...

MR BEARD: I am just reading back through the transcript. I am not sure that anything has been said there that is problematic. I think, without wanting to stop the witness going further, the point is broadly made that the Tribunal will understand from the context of the evidence that has previously been provided, I think we understand where we are. As long as Ms Demetriou is not going to take a point that we have not gone through any detail in relation to this, $I$ am sure we can pause there.

I am also just slightly conscious of the time. I understand that the Tribunal would like to rise or have two minutes' silence in two minutes. I do not know whether we should pause for a moment or whether Ms Demetriou has one more question that she would like
to pose before we do.
THE PRESIDENT: What we are going to do, you have time for one more question, but we will have two minutes' silence and then $I$ suspect it will be appropriate to have a break, but $I$ am in your hands about that.

MS DEMETRIOU: Sir, thank you. I just want to establish what this does and then $I$ will stop, if that is all right. So it really is just a question.

I just want to establish that what this shows in relation to MoneySupermarket, or what your regressions show, is that the removal of the wide MFNs had a positive effect on CTM's relative pricing vis-a-vis MoneySupermarket and that that result was statistically significant at least at the $10 \%$ level. That is what it shows, is it not? I appreciate you have just made points about contextual factors, but in terms of what the results show, that is correct, is it not?
A. The other contextual matter is the fact that we are starting from an average of insurers pricing more expensively, so the reason that is relevant -- so these covered insurers, you know, doing what they are not meant to be doing with the wide MFN, is why we have these two big factors as to why I do not attribute this to the wide MFN, but $I$ do report it in my results. MS DEMETRIOU: You do.

Sir, I think that is a convenient point.

THE PRESIDENT: That is very helpful. We are I think at 11.00, and we will begin our two minutes now. (Pause) Thank you very much. We will say 11.15. Is that appropriate? Thank you.
(11.02 am)
(A short break)
$(11.17 \mathrm{am})$

MS DEMETRIOU: Ms Ralston, can we turn up your first report at $\{A / 5 / 132\}$, please.
A. Yes.
Q. I am looking at 7.32 of your report. Do you have that?
A. Yes.
Q. You are referring here to a cheaper than test that Oxera ran during the investigation; yes?
A. Yes.
Q. What you are saying here is that you have not presented -- you say that:
"... the proportion of risks priced more cheaply on CTM than on other PCWs is not a direct test of the wide MFNs ..."
A. Yes, that is correct.
Q. "... neither is it a direct test of the theory of harm in the economic literature, which would be expected to result in insurers pricing up to the highest price it
has on other PCWs. The 'cheaper than test' was only ever included for completeness in the Oxera reports ... To avoid confusion, I have not presented [it] here." Yes?
A. Correct.
Q. If we look at the Decision, please, if we go to \{A/1/752\}, this is annex $R$ to the Decision, and if you look at R.27(a) (iii), do you have that?
A. Yes.
Q. That is referring to the cheaper than test, is it not?
A. Yes.
Q. If we look at page $\{A / 1 / 754\}$, $I$ am looking at the bottom of the page at R30(b), you see:
"In addition, Oxera submitted that the fact that, in Model 1, CTM's wide MFNs appear to have had the statistically significant effect of increasing the proportion of risks priced cheaper on CTM relative to ... other PCWs is not informative for this assessment ..."

Yes?
A. Yes.
Q. But it is not a result, is it, that you would have expected?
A. Sorry, it is not informative because if you are pricing strictly cheaper you could do that, you are not
constrained by the wide MFN. We talked about the insurers that were not constrained yesterday, so I will not name them. So that is why -- and in those Oxera reports I put above -- or we put above each of the tests what the theory of harm would predict, whether there would be a positive or a negative, and above the cheaper than test we had a question mark. So the legacy of the test, it arose because early on in the investigation we did not have as much time on the after period, so I was focusing or we were, as Oxera, focusing more on the during period, and we were looking at the extent to which there was a constraint on pricing.

So at that point, as we discussed yesterday on coverage, $I$ think it is relevant to look at whether people are choosing to price strictly cheaper. But in terms of understanding the effect of the wide MFN, I did not find it meaningful.
Q. No. What you are saying at 7.32 is that this is not a direct test of the theory of harm in the economic literature, so it is not a test of the theory of harm. In fact, you would not expect the removal of the wide MFN to be associated with this effect, would you?
A. No, I do not have a --
Q. Is there a clause where --
A. Yes, $I$ do not have a hypothesis to test with it.
Q. Right, so you are not putting forward any plausible reason why there might be that link.
A. Yes. As I have said, I would not expect the wide MFN to influence the proportion that are cheaper than.
Q. Is it not a little bit troubling that your model is showing a statistically significant effect when you say there should not be one?
A. Why would you say -- I am not allowed to ask you questions. I do not find it troubling, no.
Q. You do not think that that is a sign that your strategy might not be credible, because what it is yielding is a statistically significant result that you would not expect in relation to the wide MFN?
A. I said I do not have a hypothesis to test about that variable. I am not saying -- so that way the result could be -- there could be a result, I am not saying there has to be no influence, I am just saying I do not have a hypothesis to test for it. Given the $R$ squared, the fit of the models are quite good, 65 to 80\% are quite high, I am not concerned, no.
Q. I want to now turn to go back to your pricing analysis. If we go to $\{A / 5 / 256\}$, please, looking at paragraph A5.24. I think you describe your relative pricing analysis as being your main approach; yes?
A. Yes.
Q. We have seen, have we not, that by relative price what you are looking at is -- what you mean is the fraction of risks priced more expensively on CTM than on other PCWs?
A. Yes.
Q. What you are considering is whether the proportion of risks priced more expensively on CTM relative to other PCWs increased following removal of the wide MFNs; yes?
A. Yes.
Q. We have seen that what you say you are looking for is a positive coefficient which is statistically significant; yes? That is what you would expect to see. That is because you expect that if the wide MFNs prevented HIPs from quoting lower prices on other PCWs than on CTM, the removal of the wide MFNs would increase the proportion of risks priced more expensively on CTM; yes? Because, as you put it yesterday, the liberation takes place and other prices on other PCWs goes down.
A. So I test -- the proportion would be more expensive, because that is the contractual clause.
Q. What you are expecting -- so what you are testing -because you are looking at whether the proportion of risks priced more expensively on CTM after the relevant period has increased has gone up; yes?
A. Yes.
Q. That is because you are expecting that if there is harm, so if WMFNs are preventing HIPs from quoting lower prices on PCWs, then the removal of the WMFNs would increase the proportion of risks being priced more expensively on CTM after the relevant period.
A. Yes, that is the test, whether they increase on CTM.
Q. You understand that the CMA's case is that the wide MFNs reduced CTM's incentives to compete during the relevant period; yes?
A. Yes.
Q. That once the wide MFNs were removed, CTM had greater incentives to compete on price; yes?
A. Yes.
Q. If CTM did price more competitively after the relevant period because it competed harder on price, then the proportion of risks priced more expensively on CTM would not necessarily rise after the relevant period, would it?
A. The mechanism that the CMA considers that would arise is through lower commissions on CTM, and so I test for that separately.
Q. I am looking at this analysis at the moment.
A. But, as $I$ have said, my analysis is -- analyses stand together. So I am looking here at whether the relative pricing changed. I am looking here at whether there was
a change in the behaviour and testing the contractual clause, whether CTM competed more aggressively or reduced its commissions which then resulted in insurers pricing cheaper on CTM.

That would be captured in the commissions analysis and also this levels analysis which I presented as a sensitivity or absolute pricing.
Q. But focusing at the moment on the thinking behind the relative pricing analysis, it is correct, is it not, that the absence of a higher proportion of risks being priced more highly on CTM after the relevant period is not inconsistent with the CMA's theory of harm? It all depends on what CTM does.
A. This single test is not trying to answer the whole case. It is relevant for the reasons I motivate it in section 7 on my first report. I agree that it is useful to take other tests, and I did take other tests and analyses to further establish.
Q. That is because this test by itself cannot establish, can it, in isolation, whether or not there was no harm? Because it is focusing on something, increase of proportion of risks priced more expensively on CTM after the relevant period, which is not inconsistent with the theory of harm. So you cannot look at this test by itself, can you?
A. I would like to see $\{\mathrm{A} / 5 / 124\}$, please. Here I motivate this test. I was reading the Decision and saw the CMA is saying that the wide MFN restricted the ability to differentiate prices. So I am not saying it is -- you are asking another point, but I am just trying to say that this seemed quite important to the Decision, and so I am not sure the CMA could establish harm if this important point -- I understood this as an important point in its mechanism, so I am not sure you can establish harm if this breaks down.
Q. You understand there is a difference, do you not, between pricing less competitively, CTM pricing less competitively during the relevant period, when the wide MFNs are in force, which of course is very much part of the CMA's theory of harm, and what happens afterwards? So the CMA's theory of harm does not depend on CTM pricing more expensively after the relevant period, because at that stage competition is in full flow. It rather depends on what CTM does. You understand that distinction, do you not, Ms Ralston?
A. I do not see how that -- I have not worked out how that is -- relates to paragraph -- my paragraph 7.2 and the CMA's Decision where it is talking about CTM's wide MFN restricted the ability to differentiate between the platforms. So I thought it was quite useful to test
whether that was indeed the case by looking at the change in the behaviour before and after, and, yes, so I think it is a useful test.
Q. Let me try and explain the point again. If we look at your 7.2, what the CMA is stating is that complying with the wide MFNs restricted price differentiation; yes?
A. Yes.
Q. So in relation to -- so that is during the relevant period. Restricted --
A. Yes.
Q. -- pricing differentiation during the relevant period as compared with the counterfactual of a world with no wide MFNs.
A. Yes.
Q. What you are testing, as I understand it, is the proportion of risks which are priced more expensively on CTM after the relevant period, and the distinction I am drawing is that what $I$ am saying is that it is not part of the CMA's theory of harm that that proportion of risks would necessarily rise, because it all depends on what CTM does. After the relevant period, CTM now has no wide MFNs, there will be more competition in the market and it might compete very hard. So in fact its prices, the proportion of risks it prices more expensively, may not rise. Do you accept that?
A. This is not just a time series analysis, so sorry for confusion there. When I say "after", we are using the after period and the -- it is the difference-in-difference, so we are using the after period and how the relationship between how formerly covered -- let us just call them covered and non-covered insurers, how that relationship has changed after. So if we are saying did prices rise after, the full statement should say: does the proportion of risks priced more expensively by covered HIPs, relative to what non-covered insurers are doing, increase after removal? By doing so, you normally take that to mean that is the counterfactual. Because you are able to use this control group to benchmark behaviour, so you can infer from that that over time analysis you are going more than just over time, you can infer from the over time analysis what would have happened absent wide MFNs in the relevant period.
Q. I understand that. The point I am putting to you is that in a counterfactual world with no wide MFNs, CTM might compete on price very hard indeed, and so you may have on the one hand an effect on competition caused by the wide MFNs, but you may not see a relative increase in the proportion of risks being priced more expensively on CTM. Do you accept that in principle? It all
depends on what CTM does, in the counterfactual.
A. So, yes, there are two criticisms you have raised. One, which I have explained, about the counterfactual and that this is more than a time series; and the second point, which you raised at first, and I said that, that is beyond this test, I agree. That is why I referred to the other tests I did, which was the commissions analysis and absolute prices.
Q. You have --

PROF ULPH: Sorry, could I just ask a question at this point?

I am just getting slightly confused, or more confused than normal. Ms Demetriou keeps on referring to the pricing of CTM, whereas CTM just sets commissions. What is being talked about here is the pricing by HIPs on CTM. Is that what you are actually referring to, Ms Demetriou?

MS DEMETRIOU: Professor, yes, sorry, I was using a shorthand. That is what $I$ am referring to.

PROF ULPH: Okay, thank you.
MS DEMETRIOU: I am grateful, Professor, that is much clearer.

Ms Ralston, you have just explained that in your retail price analyses and in your commissions analysis you have used a difference-in-differences framework;
yes?
A. Yes.
Q. If we turn to $\{A / 5 / 112\}$, you explain how the framework works. In your figure 6.1 you have a stylised illustration, as you say, and essentially -- I am going to paraphrase. I hope it is not controversial. If I get something wrong, which, I may do, then do say. The test works by comparing a treated group with a control group.
A. Yes.
Q. In the illustration, the treated group are the HIPs with WMFNs with CTM, and the control group are HIPs that were not covered by -- the uncovered HIPs.
A. Yes.
Q. The comparison that is being made is what happens to the treated group when the wide MFNs are removed, and you are comparing that with what happens to the control group when they are removed; yes?
A. Yes.
Q. If the treated group prices drop by $£ 3$ and the control group prices drop by $£ 2$, then only $£ 1$-- I am speaking in a heavily stylised way and I am adopting your sort of analogy, but only $£ 1$ would be attributable to the wide MFNs.
A. Yes.
Q. If the treated group's prices drop by $£ 3$ and the control group prices also drop by $£ 3$, the conclusion will be that the wide MFNs have no effect; yes?
A. Yes.
Q. In this stylised example. I am just establishing how the difference-in-differences analysis works.
A. I am just saying there would be no evidence of an effect.
Q. No evidence of an effect. Yes, that is more accurate. So in simple terms, then, if the covered HIPs prices changed by more than the non-covered HIPs prices, that difference can be attributed to the removal of the wide MFNs, on this sort of approach.
A. Did you say covered HIPs? Yes.
Q. Yes. So it follows -- and I think you accept this -that a premise of the difference-in-differences test is that the control group is unaffected by the anti-competitive conduct; yes?
A. Yes.
Q. As you know, regression analysis is often used in cartel damages claims to quantify the overcharge that is being claimed by claimants, and in cartel cases, again, when you are conducting this kind of difference-in-differences approach, it is important for the control group to be unaffected by the cartel, is it
not? So one approach that is frequently used is to compare prices in the cartel period with a clean period at some point after the cartel; yes?
A. Yes, that would be one way.
Q. One way. There is then a debate as to what period you choose and whether the cartel had run-off effects and so on. So there can be debates about those sorts of things, but that is one way that it can be approached. Of course, what you cannot do in a cartel case, what it would not be safe to do is simply compare the prices of cartelists and non-cartelists at the same time operating in the same market, because there is then a risk of umbrella effects which would taint the comparison. You do not tend to see that sort of approach because it is risky; right? There is a possibility that the control group will also be affected by the cartel.
A. I mean, if it was a slim possibility or a possibility I would not throw it away, no. I think you would need to look at this on a case-by-case basis and think about: I have a difficult question to solve here, what is the best way to do it.
Q. I understand that. What you would be wanting to reassure yourself of, if $I$ can put it this way, is that if you were going down that road you would want to be
confident that the control group were not affected by the cartel.
A. Yes, you would look at tests to see if your conclusions were robust to potential spillovers, as I did.
Q. We are going to come to what you did, I promise.

If the control group was itself affected by the cartel or by an agreement in a similar direction to the treated group, then the comparison between the treated group and the control group no longer measures the full effect of the agreement; yes?
A. Yes.
Q. That is true, is it not, whether the effect on the control group is direct, in the sense that they consciously respond to the agreement, or whether it is indirect because they are affected by market conditions resulting from the agreement? So in either case that would be correct, would it not?
A. Yes.
Q. In the present case we have all been referring to this possible effect on the control group, so on the non-covered HIPs there is a spillover effect; yes? So we are on the same page, are we not --
A. Yes.
Q. -- as regards that? We agree, I think, that a spillover in this context means that the removal of the wide MFNs
affects not only the treated group of the covered HIPs but also the non-treated group of the non-covered HIPs. That is right, is it not?
A. Yes.
Q. We agree that that is what it means in this context.
A. That is the terminology being used, yes.
Q. If we turn to the joint statement, please, at \{A/12/25\} --

PROF ULPH: Sorry, Ms Demetriou, I would like to just ask a question at this point to try to clarify what we do mean by spillovers.

I understand the general idea, but in reading both Ms Ralston's evidence and Professor Baker's evidence, it seemed to me that there could be two rather different interpretations placed on what you mean by a spillover.

Let me just take this in stages. One thing, I am thinking about, we have the treatment group and a non-treatment group, we remove the wide MFN and that affects the pricing behaviour of the treatment group. By pricing behaviour, I have in mind what the economists would think of -- it would be like a reaction function, so that for any given price of the non-treatment group, the treatment group will now price more aggressively, it will lower the price for any given price of the non-treatment group; and that can create a spillover
effect, because even if the pricing behaviour of the treatment group -- sorry, of the non-treatment group remains the same, the fact that the treatment group is pricing more aggressively will mean that in response to that the non-treatment group will lower their price, but then the treatment group again will lower its price in response to that.

So when you calculate the overall comparative static effect of the removal of the wide MFN, the price of the treatment group will fall by more than it would have done had you held the price in the non-treatment group constant.

That is why I think it must be that the wider comparative static effect of the removal of the wide MFN, it changes the prices of both the treatment group and the non-treatment group, or the overall effect of the treatment group is larger than just looking at the effect holding the price of the non-treatment group constant.

But a second thing you might mean by a spillover effect is the fact that the removal of the wide MFN also changes the pricing behaviour of the non-treatment group. So their reaction function shifts as well, and for any given price of the treatment group they now price lower as well.

That is what I would mean by a pure spillover. That is where the behaviour in one group directly affects the entire behaviour of the other group.

I just wanted to be clear (a) do either of those two accounts of spillovers capture what Ms Ralston has in mind by a spillover and, secondly, which of those two accounts is she testing for when she was doing her tests of spillovers?

I just wonder --
A. Yes, thanks, Professor, I understand your question.

I looked at the factual evidence of spillover, and I looked at the conditions that $I$ think would result in unravelling, and I looked at other tests. So you asked me what I think of as a spillover, and I am explaining that I do not see a premise for thinking there are spillovers.

However, this has been put to -- as Ms Demetriou is putting to me now, the CMA say the fact $I$ do not see an effect is because of spillovers, and this is masking the effect.

So then I conduct more tests and interpret tests that $I$ had already done for other points that had been raised about the analysis, and I try to look at an envelope, many different forms of spillovers, because I could not find a clear description, in my opinion, in
the Decision as to what I needed to rule out.

So I hope that helps. I have tried to -- I have tested in many ways, and I think we will go on to it so I do not want to ruin that bit of cross-examination, but I test for an immediate and a delayed and a sequential and a simultaneous approach -- spillover.

PROF ULPH: So just to be clear, you are saying that either of my two interpretations would be an interpretation of spillover?
A. I think, yes, you were getting theoretically at --

PROF ULPH: Yes.
A. The first would be more natural to me; there was an effect on the treatment group and that spilt over. I have always taken that as I think the essence of the CMA's Decision that there was some knock-on effect. The second, as I understood what you were saying, is that there was almost a direct effect on the non-covered insurers as well.

I do not think that would be -- no?
PROF ULPH: My point was the second interpretation says there is an effect on their pricing behaviour. I agree with you that you would have to establish why that would be the effect, why removal of the wide MFN caused that effect to happen. (inaudible) that was one interpretation and that being placed on the notion of
spillovers.
So I just wanted to try to understand what notion you thought you had in mind when you were doing these tests, and have I understood your answer correctly to say that you were not taking a particular view as to what spillovers were, you were just trying various ways to have the possibility there might have been some kind of effect for some reason in the non-treatment group. Is that your position?
A. Yes, and $I$ think we will hear more about why $I$ think I covered both scenarios.

PROF ULPH: Okay, thank you.
THE PRESIDENT: Thank you. I suspect we will come to it in cross-examination so I will not ask, but at some point I would like a sort of list of what you did to eliminate the -- I think this is fair -- nebulous concept of spillover that you have, in the sense that you have been told there is this risk.
A. Yes.

THE PRESIDENT: It has not been articulated, and I quite understand why, very clearly as to what the risk is, we label it "spillover", and you have done something, and we will find out what that something was, in order to, you say, eliminate the pollution of your analysis by this alleged effect.
A. Yes. I mean, would it be useful for -- no? Okay. THE PRESIDENT: No, no.

MS DEMETRIOU: I would just prefer to take it in stages, if that is --

THE PRESIDENT: Absolutely fine, and we will ask our questions to the extent necessary at the end, rather than at the beginning.

MS DEMETRIOU: Sir, I am really grateful, because if I can go through in that order then, of course I do not want to shut either the Tribunal out from asking anything or Ms Ralston out from saying anything, but in terms of my deadline, which is lunchtime, if $I$ can go through in my order that would be helpful, to take it in stages.

THE PRESIDENT: Entirely right.
MR BEARD: I should say, I indicated to Ms Demetriou that given we started early it might be better to take an early lunch break, and if that means that Ms Demetriou has to spill over into the afternoon -- unfortunate term, sorry -- then in those circumstances that is completely understood. But I think it would be better, rather than just trying to press on to the end of cross-examination --

THE PRESIDENT: Yes. If we take lunch early, Ms Demetriou, we will make sure you have time on the other side of the break.
A. I know that Professor Ulph wanted to talk about a paper at some point, the Johansen --

THE PRESIDENT: He does.
MR BEARD: I know that will come in at some point as well I do not think that is lost. I think that is one of the reasons I suggest we should not just try and press on regardless on timing.

MS DEMETRIOU: Sir, that is helpful. Perhaps we can see where we are in my questions when it comes to the sort of time that we would be taking an early lunch and take a view as to what the best thing is to do.

THE PRESIDENT: Yes, why do you not. Keep an eye on 12.30 as probably the time we might want to raise. MS DEMETRIOU: Sir, I am grateful.

If we could turn up the joint statement, please, at \{A/12/25\} and at F.2. I just want to establish the common ground before we go on to look at the rest.

You agree that if the no spillovers assumption does not hold, that your difference-in-differences analyses will necessarily underestimate the effect of removal of the wide MFNs on the covered HIPs; yes?
A. Yes.
Q. In other words, if there are spillovers your results will underestimate the effect of the wide MFNs; and your position is that there is no evidence of spillover
effects in this case. If we look at F.2, your position there, you make three points. You say that the CMA has not presented empirical evidence about spillovers; yes? I am looking at the first bullet. You say in the first and second bullet as well that the more likely outcome, in your view, would be unravelling of any upward effect on commissions and retail prices; yes?
A. Yes.
Q. I am going to come back to the test that you carried out.

In this context, of course, what the CMA has found is that removal of the wide MFNs had an effect on non-covered HIPs as well as covered HIPs; yes? That is what it has found.
A. Yes, it has found that.
Q. The two groups -- because the two groups compete and react to one another in the market; yes?
A. Yes, they compete.
Q. Well, it is your own opinion, is it not, that they compete in the market? You agree with that?
A. Yes.
Q. If we turn to your second report at $\{A / 9 / 61\}$, you say at 3.25 that the facts of this case are consistent with the situations under which the effects of a cartel would unravel; yes?
A. Yes.
Q. We have discussed unravelling already, we did that yesterday, but the premise for your unravelling argument is that there is homogeneity in terms of the products and that there is intense price competition between HIPs; yes?
A. That is part of it. I put a number of reasons there, but you are referring to one and I agree with that reason.
Q. You are saying that any effect of the wide MFNs on covered HIPs prices would unravel because of price competition from the non-covered HIPs; yes?
A. From and amongst the non-covered.
Q. Yes. That is the same mechanism, I think you agree, is it not, that the CMA has found gives rise to spillover effects, the same competition between the two groups?
A. I disagree, because competition among the non-covered HIPs drags things down. I do not understand how competition among covered insurers could rise prices up or spill things over in that sense.
Q. It may be I am not being clear.
A. Okay.
Q. Let us go to $\{\mathrm{A} / 9 / 118\}$.
A. Yes.
Q. What you are saying there at 5.29 is that spillover
effects and unravelling are two sides of the same coin; yes? That is because what we are looking at is competition in the market, is it not, and the CMA has found that that competition has likely given rise to spillover effects, and you think, your view is that competition leads to unravelling; yes? It is the same competition we are looking at, and it is what the impact is, where it leads; yes?
A. Yes, there are similar factors at play.
Q. Yes. Thinking about how price competition might work, so assume for a moment that HIP A has a wide MFN with CTM; yes?
A. Yes.
Q. It quotes a particular risk on both CTM and MoneySupermarket; yes?
A. Yes.
Q. Suppose that when the wide MFNs are removed, HIP A decides to reduce its retail price on MoneySupermarket, perhaps because MoneySupermarket has offered a lower commission.
A. Yes.
Q. That is the primary effect that we are seeking to measure, is it not? We can call that the primary effect of the wide MFN; yes?
A. Yes, and I am referring to that as direct, but okay.
Q. Direct. I am not going to get caught up in terminology. Then let us take HIP B, and HIP B is a non-covered HIP.
A. Yes.
Q. It sees the reduction in HIP A's price on MoneySupermarket and it thinks: well, this is a competitive market, I am going to respond by reducing my retail price, otherwise $I$ am going to lose sales. That would be a spillover effect; yes?
A. Yes.
Q. So the removal of the wide MFNs in those circumstances has affected both the covered and the non-covered HIP; yes?
A. Yes.
Q. Some non-covered HIPs, so some HIPs in the position of HIP B, might react immediately because they know that the wide MFNs are going to be removed; yes? So they might say: here is an opportunity, $I$ am going to react and I am going to lower my price; yes?
A. All on the premise that there was a trigger from the covered HIP being affected, and then we are now getting these spillovers.
Q. I am just asking you something else. I am asking you to agree that if HIP B, which has been constrained in relation to what it can do --
A. I think it was -- I thought it was HIP A that was
constrained.
Q. If HIP B knows that the wide MFNs that HIP A and others are party to are going to be removed, it might spot an opportunity and lower its retail price. That is a possibility, is it not?
A. But this all starts from a premise that the price is above the competitive level to begin with, a direct effect, which I am saying has not been established because of --
Q. I understand that is your case. I am just looking at how things might pan out. Some non-covered HIPs, so some HIPs in the position of HIP B, seeing that there is now more retail competition in the market because HIP A, for example, has lowered its price, some HIPs might respond immediately and some might take a little bit longer, yes, depending on their business structures?
A. They are going to see these prices and respond, so that is sequential, but they might take different amounts of time, yes.
Q. They might take different amounts of time. In fact, their business strategy is going to come into play. Some might be competing more vigorously on price and some might compete on brand recognition more than on price, and so there may be different levels of price sensitivity as between the HIPs; yes? Some might be
more aggressive competers on price and some less aggressive competers on price.
A. Yes, as competitors, there will be limits to the extent to which they can resist.
Q. Of course, that is correct. In my situation where HIP A has reduced its price on MoneySupermarket and HIP B, which is non-covered, has responded, HIP A might respond again. It might say: I am going to reduce my price below, because I am keen to take this business away from HIP B. That is a possibility. Then HIP B might respond to that. That is how price competition works, is it not? It is iterative in nature; there might be multiple rounds of price reductions.
A. I mean, assuming that they are starting above the competitive level, which is quite important, because if they are already competing with the uncovered HIPs to begin with they cannot sustain prices above the competitive level to begin with.
Q. I am assuming that prices are above the competitive level. I am assuming that there is a suppression of competition as a result of the wide MFNs. The wide MFNs, during the relevant period, have dampened price competition.
A. Okay.
Q. Then I am looking at what might happen once they are
removed. There may be an iterative process of price reductions. That is right, is it not?
A. People model it differently. As you say, early on you were talking about -- so the first scenario you spoke about was they see prices, and then the non-covered HIPs respond to that. A second scenario you spoke about was non-covered HIPs anticipating a world change. Then now you are talking about $I$ think the first scenario where the covered respond, $B$ responds to $A$.
Q. Yes.
A. Then A responds to B.
Q. Yes.
A. But where $I$ am going is that if -- this seems
inconsistent, because if $I$ am going to cut prices $I$ am going to think through the iteration, I am going to initially set my strategy to be profit optimal, so some would model that so the price would immediately drop.
Q. Do you think all HIPs -- you do not think there is any possibility, then -- is that what you are saying? -that there would be some iterative process of price reductions, because everybody employs economists to model what the precise price reduction is that is optimal; is that your position?
A. I am trying to see if the logic that you are putting to me is logical, and I am thinking, in my mind, that if

I am going to do this inch-by-inch approach does that make rational business sense? Why not steal a march, as I think we are referring to it? Probably there is a possibility of a different iteration, so when I did my empirical test I tried to just be quite broad in approach.
Q. Let us think about PCWs. Assume now that when the wide MFNs were removed this had an effect on PCWs. Let us take CTM itself.

As covered HIPs are now free to offer lower prices on CTM's rivals once the wide MFNs have been removed, they should be, should they not, in a better position to negotiate reduced commission on CTM? That is how it works, is it not? Because they have a more credible threat. They can say: if you do not lower your commission, I can reduce my prices on MoneySupermarket, so you had better lower your commission; yes?
A. You are starting with a premise that there was an effect.
Q. I am.
A. So then, almost by definition, you are starting from the premise there is an effect, so after the removal there will be an effect. You have assumed that in your situation.
Q. I am assuming that there is a constraint placed by the
wide MFNs on PCWs during the relevant period.
A. Yes.
Q. I am saying that once the wide MFNs are removed, then at that stage a HIP, a covered HIP, who has been in a position where it has to accept commission increases from CTM, for example, because of the wide MFN -- assume the link for the moment -- once the wide MFN is removed they are in a better position to negotiate, are they not, with CTM? Because they can say, apart from anything else: well, if you do not reduce your commission we are going to price lower on MoneySupermarket.
A. Well, I mean, that is contradictory with the Johansen \& Vergé paper.
Q. I am so sorry?
A. That is inconsistent with the Johansen \& Vergé paper, which is theoretical and is exactly to that point, so that is why I brought that in.
Q. That paper -- I am going to come to that.
A. Okay.
Q. Rather, I think, Professor Ulph is coming to the paper I do not want to deal with the paper at the moment because that assumes -- that makes certain assumptions about how the market operates, and I think it is contentious whether those assumptions work here. One of
the assumptions is that there is a credible threat of delisting, which we have gone through; yes?

What $I$ am putting to you is that it is possible, is it not, that if a covered HIP was not having any joy with CTM in terms of commission negotiations during the relevant period, once the wide MFN has disappeared then it has more bargaining power, has it not? It is likely to have a better chance of negotiating lower commission rates because what it can do is price more cheaply on other PCWs.
A. If you are assuming that world away, then you are referring to a mechanism that, yes, a wide MFN restricts -- contractually restricts differential pricing, so if you remove a contractual restriction that was effective, then you can differentiate price.
Q. Yes, and in my world -- I accept that you do not agree with my starting point, but in my world if covered HIPs negotiate lower commissions on CTM, then in turn they should be able to negotiate lower commissions on other PCWs; right? Do you agree with that?
A. Are you talking sequentially now, or ...?
Q. I am not talking about anything. I am saying if they have negotiated a lower commission with CTM and that is translating into lower retail prices on CTM, what they can do is, I suppose sequentially, yes, they could turn
round the next day and say to MoneySupermarket, "Well, you had better lower your commission too"; yes?
A. Again, this is if your commissions are above the competitive level it would be an important part of that.
Q. Yes, I understand the caveat that you are placing.
A. Okay.
Q. That would in turn incentivise other HIPs to lower their retail prices on those PCWs, would it not? If you have one HIP doing it and that results in lower retail prices, we are back to my HIP A/HIP B example.
A. Yes.
Q. There is no reason to think that in this world it is only covered HIPs who would do this, because non-covered HIPs would have just as much of an incentive to respond to these changes. That is correct, is it not?
A. You see, non-covered HIPs can do this even if the wide MFN were to be having an effect on the wide MFN HIPs, which is just why $I$ find this assumption of assuming an effect just so difficult to accept, because if -- I have set it out in my second report with a small diagram to explain exactly how this would unravel. So I find it a very odd thing to assume this direct effect immediately.
Q. What $I$ am asking you is let us assume at the moment that the removal of the wide MFNs caused PCWs to lower their
commissions. I am asking you to assume that.
A. Yes.
Q. I know you do not agree with it. But assuming that, this is likely to have an effect on prices of both covered and non-covered HIPs, is it not? There is no reason why those effects should be limited to covered HIPs.
A. Yes, if we are assuming that the wide MFN had an impact, then it is possible that all insurers would lower their price.
Q. Let us now assume that there is some unravelling. What we have at work, you have established with your two sides of the same coin point, is competition on prices between covered and non-covered HIPs. Then let us assume that there is some unravelling but that unravelling is not complete; in other words, the existence and the competitive constraint exerted by the non-covered HIPs causes a dampening in the effects on competition, the direct/primary effect, whatever we want to call it, but does not totally unravel it. Then it is possible in those circumstances -- I think what you would agree with is that what you would see in those circumstances is a dampening of the effects of the wide MFNs -- yes?
A. Yes.
Q. -- in a case of partial unravelling --
A. Partial.
Q. -- and also some spillover effects; yes?
A. Yes, if you had partial unravelling such that there was still some direct effect, then you could also possibly have some spillovers of the remaining partial effect.
Q. I want to turn now to your tests that you carried out, so the five --

THE PRESIDENT: Ms Demetriou, I think it is a question for you, we will obviously be reading this passage with great care after the event, but $I$ just want to be clear what consequences you are postulating about the removal of wide most-favoured-nation clauses.

My understanding, but do please correct me if I am wrong, is that you are postulating two effects. One is that HIPs can differentiate their pricing across a PCW, and so they can offer a bargain basement offer through PCW A which they do not have to replicate on PCW B, because they are free to do so contractually.

That is a consequence which is entirely unrelated to the question of commission rates. It is simply a --

MS DEMETRIOU: Well, it is connected, sir.
THE PRESIDENT: How?
MS DEMETRIOU: Because if a HIP is offering -- I am concerned we are now straying into submissions rather
than cross-examination. If a HIP is -- a HIP is able to respond to -- a HIP is unlikely to want to just offer a lower price on a competing PCW, a lower retail price, unless it is getting something in return, and that would be the lower commission fee. Otherwise, all it is doing is -- otherwise what it is doing is -- if it does not get something -- so it is driven -- the CMA's case is that this is driven -- and this is what Dr Walker was explaining, is that competition on commissions is very important, because what you see is PCWs seeking to compete with each other to attract lower retail prices from HIPs, and in order to do that what they are doing is offering lower commission. So they are not -- it was put to me that they are unconnected and I do not think we can say they are unconnected.

THE PRESIDENT: All right. I will retract the unconnected. But two effects. One is simply the ability to price differentially, that becomes possible, and therefore perhaps more frequent because you can narrow the cost of the bargain, because you only do it on one PCW, not several.

MS DEMETRIOU: Yes, you do not have to replicate it on the СTM.

THE PRESIDENT: Exactly.

MS DEMETRIOU: Yes.

THE PRESIDENT: The other effect of removing wide most-favoured-nation clauses is that you create a form of competition on commission. You say that those two consequences are connected.

MS DEMETRIOU: Yes.
THE PRESIDENT: I am perfectly happy to accept that as your articulated case.

To what extent are you saying that the effect of that competition on commission is going to have a material effect on the prices that HIPs offer? The reason $I$ am asking this is because is it not the flipside of the point that Dr Walker was making, and that you make in your submissions, namely that if you vary the commission rate, so if you take for instance the SSNIP on the commission rate, it affects the prices on the websites by $1.83 \%$, so not a great amount in other words?

MS DEMETRIOU: Sir, our case is, as you have correctly described it, that the softening of competition on commission prices results in a softening of competition on retail prices.

THE PRESIDENT: Right.

MS DEMETRIOU: Of course, it results in an effect on retail prices. That is what the CMA has found.

THE PRESIDENT: Yes.

MS DEMETRIOU: The question of whether that effect is appreciable or not is for the Tribunal to determine. But, of course, what we say is that if you have a relatively small effect in a world where consumers are price sensitive, consumers on PCWs, and there are lots of consumers, so that small effect, a small effect, replicated across lots of consumers, is an appreciable effect on competition. That is our case.

THE PRESIDENT: That is fine. We are talking then about on an individual case, and I quite take your point about the cumulative effect if you look at the number of home insurance policies that are purchased, but we are talking about an individual effect that is going to be of the order that we were considering in relation to the SSNIP on the commission.

MS DEMETRIOU: Sir, yes. Then in relation to promotional deals, of course, you have the evidence that we were canvassing yesterday where Professor Baker says in his report that -- well, let us just have a look at that so I can show you the evidence. I do not want to get too much into this, but can $I$ show you --

THE PRESIDENT: Of course.
MS DEMETRIOU: In Professor Baker's report at $\{A / 7 / 15\}$, paragraph 46, do you see that:
"As background, on average a promotional deal between a PCW and a HIP might involve a 7\% reduction in the commission paid by the HIP and lead to a 6\% reduction in the retail price ..."

When one is looking at it through the lens of promotional deals or looking at the effect on promotional deals, those are the figures that --

THE PRESIDENT: That is why I described my first effect as unconnected, because it seems to me the promotional deal that may be encouraged is discouraged by the wide most-favoured-nation clause because, if it bites, you have to do it across all platforms.

MS DEMETRIOU: Yes.
THE PRESIDENT: Whereas if you do not have the wide most-favoured-nation clause you can do it on a specific platform and so it costs you less.

MS DEMETRIOU: Sir, yes, exactly.
THE PRESIDENT: But that is utterly unconnected with the commission point.

MS DEMETRIOU: I think one can distinguish between promotional deals and base retail pricing.

THE PRESIDENT: Yes.
MS DEMETRIOU: In relation to the base retail pricing a similar mechanism works. So the percentage will presumably be less, but it is still the same mechanism.

You have seen in some of the contemporaneous documents discussion about negotiations with CTM and with other PCWs on base retail pricing and commissions, so on commissions feeding through to base retail pricing. So it is the same mechanism.

THE PRESIDENT: Yes, I am obviously not saying that these things are inevitably hermetically sealed one from the other, because you have obviously got to have a negotiation with the price comparison website as to the basis on which the promotional deal is dealt with. MS DEMETRIOU: Yes.

THE PRESIDENT: That will obviously involve a discussion about who bears the cost, and inevitably you are likely to consider commission in that framework.

The point $I$ am making is that are you not selling yourself a little bit short in terms of describing the consequences of removing wide most-favoured-nation clauses simply because, leaving on one side the precise negotiation about the terms of a promotional deal, you are going to be more attracted to doing a promotional deal if you are not obliged to put it across the whole PCW market.

MS DEMETRIOU: Yes, absolutely, that is correct as well. We do say that, the CMA does find that, sir thank you. Sorry it took me a long time to get there.

THE PRESIDENT: No, no, it is just the questions that you were putting to the witness seemed to me to be focusing on a theory of harm that was a little bit narrower than the one that $I$ was understanding.

MS DEMETRIOU: I understand. I think that is right.
I understand, sir.
Of course, what I am exploring with the witness, the witness' position is that there is no anti-competitive effect in the first place, as she had made clear, so it is all on the premise that there is a constraint, so Ms Ralston has made that clear and we disagree about that, and that is what the Tribunal will have to decide.

THE PRESIDENT: Yes. The particular constraint you are talking about is one which is actually quite a small one, if you are talking about how commission feeds through -- and again I am talking about the individual case, but how commission feeds through to quotations of policies. When you are looking at differences, we are looking at what is intrinsically a small difference. When one is looking at effects, cumulatively large, but if you are conducting your econometric analysis we are talking about 1.8 to $3 \%$, that sort of difference -MS DEMETRIOU: Yes.

THE PRESIDENT: -- which is something harder to spot than $20 \%$.

MS DEMETRIOU: We say it is definitely harder to spot, and, sir, I agree with you that one can step back and say, well, the wide MFNs -- and this is what the CMA does say -- constrain HIPs that are covered from them pricing more cheaply on CTM's competitors. Once those have gone, they can do that. So that is the broader point I think you are putting to me, and that is indeed the CMA's case.
A. Related to my analysis, I would like to clarify that the relative pricing, I would not be needing to spot a $1.8 \%$ change because, as Ms Demetriou explained, my test is looking at the proportion of risks priced more expensively. So even if it was a small amount by which the insurers were pricing more expensively on CTM, that could be across all those risks. 50\% of risks, you know, so it would be easy to pick up even a small change in relative pricing in absolute terms because I am looking at proportions of risks.

THE PRESIDENT: What you do is you --
A. Frequency is --

THE PRESIDENT: -- cumulate the 1.8 across --
A. (Overspeaking) Yes, I look at the frequency of those price differences.

THE PRESIDENT: In a sense, the harm that the CMA is postulating, which is you have to look at the overall
market effect, whereas for the individual policy it may be a small amount, but when you multiply it across all the policies that is a lot, your analysis does exactly the same in that you cumulate lots of potentially small effects and therefore get a figure that is more appreciable.
A. Yes, if it were the effect, yes. Also, the relative pricing would capture promotional deals as well because they would affect the relative pricing on the platforms.

THE PRESIDENT: Thank you both very much. That was very helpful.

MS DEMETRIOU: Not at all, sir.

Ms Ralston, you have conducted five tests which you say verify that your regression results are robust to spillover bias. That is right, is it not?
A. Yes. I conduct five and consider that shows the robustness of my results.
Q. The first test is what you call a leads and lags test. If we look at $\{A / 5 / 121\}$, please, at 6.61, what you say is the lag part of the test, the lag coefficients can be used to inform about potential spillover effects. That is what you say in the first bullet there; yes?
A. Yes.
Q. I think you acknowledge, do you not -- I think you say this in terms -- that the purpose of the test is not
a direct test for spillover effects. Its primary purpose is to identify whether the effects of removing the wide MFNs change over time. That is right, is it not?
A. Yes, basically $I$ think it will help if $I$-- basically we look at, in the monthly data which we have for relative pricing, these lags and leads are talking about the relationship between the control untreated group each month, and the leads is that relationship each month before the event, and the lags are the relationship each month after.

So it informs as to whether there is a change in that relationship after event and could help inform if there was a spillover for example.
Q. Thank you. At the risk of oversimplifying, I think what you have just said in my layman's terms is that what you are doing is you are zooming in in effect into your regression results and you are looking at the difference between the covered and the non-covered group, their pricing, but at monthly intervals both before and after?
A. Yes.
Q. So you are breaking down the results in that way?
A. Yes. I sometimes think of them as -- I do not know why -- two packs of dogs, do they run together or do they start to run all over the place afterwards.
Q. I am not going to forget the pack of dogs analogy. Next time I have a leads and lags piece of evidence, it is going to come back to me.

It is still the same control group, is it not, so it is still a difference-in-differences analysis, you are zooming in on the analysis?
A. Yes.
Q. What you say is that the lags could indicate the presence of spillover effects if those effects occurred at a delay; yes?
A. Yes. Yes, I was thinking here that if we had this type of spillover where there was a direct effect and then a sequential reaction by the non-covered HIPs, you would see this divergence, you would see the dogs moving apart over time or come together, and you could see whether, if you saw that trend -- sorry, them coming together and then moving apart -- then that could support some spillover.
Q. What sort of pattern would you be looking for in the lags? Would you be looking for an effect at the outset which then tails off as the spillovers kick in?
A. They are defined as, yes, the treated minus the non-treated. So we are saying that there is a trigger from the treated on to the non-covered HIPs, so we would expect to see a convergence as the effect on the -- as
the effect diminished because this covered HIP -- sorry, the non-covered HIPs caught up.
Q. Right. As you say, your test assumes that there is a clear sequence, does it not, between the reactions of the covered brands on the one hand and then of the non-covered brands on the other?
A. I presented the results, and in case someone else had another idea about how spillovers might arise they could interpret the chart differently, but that is what I had in mind when $I$ was looking at those regression results.
Q. I think it is right, is it not, that this test or this way of looking, looking at the lags, would not identify any spillover effects where they did not happen at a delay, so where they happened at the same time as the primary effect, or indeed I think you say within the same month --
A. That is right, yes.
Q. -- they would not be identified on this test?
A. No.
Q. Of course the CMA's case is that if there are spillover effects these might well take place within the same month; yes? So going back to my HIP A and HIP B example, if $H I P$ A reacted to the removal of its wide MFN by lowering its price on MoneySupermarket, then HIP B might respond very quickly once it has seen that lower
price?
A. Yes. If it was two months you would see the convergence because as you said it was monthly, but $I$ could not rule out a simultaneous effect on that analysis.
Q. It is not simultaneous in the sense of the same day, is it?
A. The same month.
Q. The same month, exactly.
A. Yes.
Q. If you then have iterative competition, so if you see HIP B reduce its price and then HIP A responds and HIP B responds to that, then again this lags test by itself would not identify spillover effects, would it?
A. It would pick up some iterative types, if you had some differential effectively in how the iteration happened. So when you broke it down like covered, non-covered, covered, non-covered, then you see patterns you can pick up, but if it is all a blur, then, no, this would not pick up effectively a blurred effect.
Q. By "blur", let us just be clear, a blur could happen when lots of competition is going on in an iterative way by all the covered and non-covered HIPs in the market. In that sort of blur world, you would not pick up spillover effects?
A. If the average effect each month was the same for each
group of insurers, then, no. So it would have to be the average as I say. Otherwise you would start to see that.
Q. You have not offered a plausible reason for why non-covered HIPs would take more than a month or would not respond in the same month?
A. Because they are already very actively promoting, so I do not think there is a reason -- I do not see a reason why they would be affected by the wide MFN at all.
Q. I understand that, but if they were affected you do not offer a plausible reason why there would be a delay in their reaction, do you?
A. I have not offered a plausible reason.
Q. In fact yesterday when we were talking about promotional deals you were saying that all of this can be done -this competition can take place very quickly?
A. Yes. My position based on that quote from that PCW is that these promotions happened quite quickly.
Q. If we go to your second report, please, at $\{A / 9 / 125\}--$ Mr Beard reminds me it is 12.30. I think to be fair to everyone $I$ am going to be a little bit longer than half an hour. I do not think very much longer, but I think in those circumstances, because I cannot guarantee that I am going to be finished by 1.00 , and because we
started early and given the Tribunal's indication, then it may be that we should break now before --

THE PRESIDENT: I think that is sensible, because it is a long day and this slightly ameliorates, at the price of a longer afternoon, a long morning. So we will rise now and we will resume at 1.30 .

I will check over the short adjournment, but Mr Beard I do not think that there is any problem -there is certainly no problem going to 4.30. We might be able to go a bit longer than that if it assisted.

MR BEARD: I think if we go to 4.30 and then perhaps start early tomorrow.

THE PRESIDENT: That may be harder.
MR BEARD: Yes, I am so sorry, Professor Baker, I apologise.
THE PRESIDENT: Professor Baker, and I think we have our own reasons for requiring a 10.30 start.

MR BEARD: Understood.

THE PRESIDENT: We will think about stretching the day
a little bit further given it is not going to be
Ms Ralston in the box all day.

MR BEARD: I am grateful.

THE PRESIDENT: We will resume at 1.30 , thank you.
(12.32 pm)
(The luncheon adjournment)
(1.33 pm)

THE PRESIDENT: Yes, Ms Demetriou.

MS DEMETRIOU: Thank you.
Ms Ralston, if we could turn up your second report, please, at $\{A / 9 / 125\}$, that should come up on the screen, and I am turning to your second test.
A. Yes.
Q. Your second test, you say at 5.51 of your second report, looks at whether the control group's pricing behaviour changed in the three months following the disapplication of the wide MFNs. You say it involves determining whether non-covered brands reacted differently to removal in the three months immediately after disapplication compared with how they behaved in previous months and later months; yes?
A. Yes, it reads that. The next paragraph covers it a bit more fully.
Q. Yes, that is right. So what you do is you have an initial specification of three months.
A. Yes.
Q. Then you take further three-month periods.
A. That is correct.
Q. It is not just one isolated three-month period. You are taking a series of three-month periods. That is right, is it not?
A. That is correct.
Q. Let us think for the moment about your first three-month period. In order to identify a spillover effect, the control brands would need, I think, to react in that three-month period and then to reverse their reaction at the end of the three-month period and revert to their counterfactual pricing. Is that correct?
A. It would not need it to fully extinguish like that, but that would make it strongest; and the other point of this test was to see how the effect on the wide MFN coefficient changed when you controlled for a potential spillover.
Q. Right, going back to my HIP B example which is not covered, so if HIP B, which is a non-covered HIP, responds to the removal of the wide MFN and does so in the first three months --
A. Correct.
Q. -- so let us say it reduces its retail price during the first three months and --
A. Yes.
Q. -- then after the end of the three-month period it continues with its reduced retail price, your second test would not pick up that spillover effect, would it?
A. It could do, because I compare to the during period as well, but it would be reduced because it is using the during period and the time after that three-month window
as the benchmark in this case.
Q. If we think about, say, your next three-month period, so if you were going to identify a spillover effect you would need to see HIP B reduce its pricing during that three-month period and then reverse or at least partially reverse that change after the three-month period. So again, if it reduced its pricing in your second three-month period and then carried on with the same reduced price level into the next period after that, you would not pick up a spillover effect, would you, on this test?
A. For the same reason that $I$ am using the during period as the benchmark, so I have 12 months before, and then I have some time after in the control period for the control group -- it gets confusing with language -- but because I have the during period, so if it was 110 and then it went down to 100 in one of my three-month windows and stayed at 100 forever more, you would still potentially pick up that gap of 10 because $I$ have the during period as well, as a benchmark to the control group.
Q. Right. Your original difference-in-differences approach, you accept assumes no spillover effects; yes?
A. It is on the premise of a common trend beforehand.
Q. I think you are agreeing, you are making a point about
the during period but $I$ think you are agreeing, are you not, that if pricing is changed during the three-month period, so if there is a spillover effect during the three-month period and that is not extinguished after the three-month period, then it is going to be difficult to pick up an effect, is it not?
A. I was disagreeing that you would not pick it up, but I agreed that it would be -- it would be most pronounced if the spillover was in -- was only in the window $I$ am capturing. But $I$ am saying you could still pick up a spillover even if it continued forever more, because I have such a long before analysis.
Q. You do not know if you would, do you?
A. If it was a very small spillover, it might not be picked up.
Q. Right, okay. Your third test, the third test which we can see at page $\{A / 9 / 126\}$, what you have done here, am I right, is that you have essentially redone your difference-in-differences analysis of relative prices but you have narrowed the treatment group to only two covered HIPs; and the names are confidential, I am not going to say them, but we can see what they are at paragraph 5.55; yes?
A. Yes, that is my test.
Q. So this is right, is it not, that if there are
spillovers, the bias still remains because the control group still assumes no spillovers?
A. The bias would remain.
Q. What you say is that you have narrowed the treatment group to the two HIPs that you think are potentially most affected by the wide MFNs. So I think your point is that this makes it more likely to lead to a statistically significant result which would be visible despite any spillovers. I think that is your point, is it not?
A. Yes, that is the point of this test.
Q. You do not know, do you, that the pricing of these two HIPs was affected more than any other covered HIPs? I think the reason that you rely on them is because these two brands gave the CMA a lot of direct evidence about being affected. That is right, is it not?
A. Yes, this was the outcome of the coverage analysis where I was most uncertain about those insurers.
Q. The fact that there may be a lot of direct evidence that they were affected does not actually mean that their prices were necessarily affected more than others, does it?
A. I was trying to look for -- if $I$ thought -- if it does not mean they were more affected, then what does the direct evidence mean? To me, if there is more evidence
of an effect, it means there is more evidence of an effect. So using them as your treatment group would exaggerate -- pronounce -- would mean that the effect of the wide MFN would be more pronounced.
Q. There may be a difference, may there not, between a situation where there is direct contemporaneous evidence of covered brands saying -- I am paraphrasing -- we are constrained by the wide MFN. So on the one hand there may be more evidence of that type in relation to particular HIPs. But that does not necessarily mean that other brands were affected in terms of their pricing just as much. You accept that?
A. I think I accept that it could be that these were also not affected, despite the strong -- or the factual evidence that suggests they might. I am not sure $I$ have any reason to think that other covered insurers would have been affected as much, which would be another way to say there would be no difference.
Q. All right, that is obviously a point of disagreement which we will come back to in submission.

In your fourth test, you have rerun your difference-in-differences analyses, but this time you have narrowed down the control group. That is right, is it not?
A. That is correct.
Q. What you are trying to do is extract or take out of the control group the HIPs that you think are most likely to have been affected by spillovers. Is that right?
A. The caveat, I would say, is I identified these insurers based on what the CMA says in their Decision about these non-covered insurers. I have no reason to think they were affected by the removal.
Q. So your approach has been to remove the HIPs -- is this correct? -- that did not engage in any promotional deals during the relevant period but started to do some afterwards. I think that is what you have done, is it not?
A. Yes. Yes, I have referred to the paragraph in the Decision and the reason that the CMA says -- the CMA points to these as referring to -- as non-covered HIPs that have been affected by the removal.
Q. It is right, is it not, that your control group in the fourth test will still contain non-covered HIPs who are engaged in more promotional activity after the wide MFNs, even if they did some during the relevant period; yes? So you have not taken those out. You have taken out HIPs that did not do any promotional deals in the relevant period and did some afterwards.
A. Yes.
Q. But there may be some that did more afterwards but did
a little bit during, and those are still in the control group, I think.
A. They may be.
Q. Well, do you know?
A. If we could look at 5.60 where I describe --
Q. Yes, that is page $\{A / 9 / 127\}$.
A. It is the next page, yes.
Q. I think what you are saying is that you have identified -- sorry, you want to look at it.
A. Yes, I looked at the Decision and where they provided these references to covered insurers that had reacted to the removal, and they referred to these insurers. So I have not reviewed the other non-covered insurers to make that assessment that you asked me to give a view on.
Q. I think then it is fair to say that you have not reviewed them either to check whether or not -- I think you are saying that the control group is still likely to contain non-covered HIPs who did not change their promotional activity but who may have reacted to the removal of the wide MFNs in other ways, in particular by changing their base retail price. That is not something that you have sought to extract from the -- they are not the group that you have sought to extract from the control group.
A. I have sought to extract all the insurers that the CMA identified, which were non-covered insurers that have changed their behaviour in a way that would be consistent with more competition post-removal. I have not sought to extract insurers that were non-covered that may have changed their behaviour in either direction in other dimensions that have not been attributed to the wide MFN, because that is the point of having a control group; because people can change their behaviours for many reasons, and it is useful to -- that might be the same for the wide MFN group, and so I want to have -- I want to have normal market dynamics in my control group.
Q. Just to be clear, where you say you have sought to extract --
A. That is the 5.60 and 5.61.
Q. Just now you have said you sought to extract all the insurers that the CMA identified which were non-covered insurers that have changed their behaviour in a way that would be consistent with more competition post-removal.
A. Yes.
Q. Specifically what you have done is you have looked at non-covered insurers that did not do any promotional deals in the relevant period and did start doing them afterwards. That is how you have approached it, is it
not?
A. Yes.
Q. Your fifth test relates to commissions, does it not?
A. Yes.
Q. It relates in particular to your commissions analysis on all PCW commissions; yes?
A. Yes.
Q. Your original model assumes, does it not, that when a PCW removes wide MFNs, this only affects the commissions paid by the covered brands to that PCW; yes? That is the original model. So it assumes there is no effect on commissions paid by non-covered brands to that PCW, and it also assumes there is no effect on commissions paid by any HIP to other PCWs. I think that is right, is it not?
A. Well, for the same -- that would be the main approach but, as $I$ have said, this is robust to small spillovers because you could still pick up an effect.
Q. I am just at the moment trying to locate what you have done in your original commissions analysis. I am correct, am I not, that it assumes that when a PCW removes wide MFNs it only affects the commissions paid by the covered brands to that PCW, so you are assuming no effect on other commissions?
A. Yes, and $I$ am saying that even if there were a small
effect it would still be robust to that.
Q. Then what your fifth test does is it makes a change, does it not, so it no longer assumes that there is no effect on the commissions paid by the non-covered brands to the PCW which disapplied the wide MFN; yes?
A. So effectively I model the control group separately in my fifth test. So I look to see -- it is almost like a time series analysis.
Q. Can $I$ just ask whether you agree with the proposition that I have put to you, which is that the change made by your fifth test is that it no longer assumes that there is no effect on the commissions paid by the non-covered brands to the PCW which has imposed the wide MFNs; yes?
A. Yes.
Q. What it does is it maintains the assumption that the commissions paid by both covered and non-covered brands to the other PCWs remain unaffected; yes? So it maintains that assumption.
A. I am just going to write some of this down.
Q. Of course.
A. Would you run it by me again?
Q. Yes. Your original model -- should we start with the original model, are you happy with that?
A. Yes, I know the original model, that is fine.
Q. Your fifth test makes a change, I am putting to you.
A. Yes.
Q. It no longer assumes that there is no effect on the commissions paid by the non-covered brands to the PCW which disapplied the WMFN. Let us call it CTM.
A. Yes.
Q. It no longer assumes there is no effect on the commissions paid by the non-covered brands to CTM, but it maintains the assumption that the commissions paid both by covered and non-covered brands to other PCWs remain unaffected.
A. Yes, that is correct.
Q. If we go back to my HIP A example, so HIP A is covered, your analysis assumes -- is this right? -- that the removal of its wide MFN will not affect the commission it pays to MoneySupermarket once the wide MFNs with CTM are removed.
A. Sorry, again I got lost.
Q. Of course. I am applying where we have got to so far. So HIP A -- I am talking about the analysis now, the fifth test.
A. Yes.
Q. HIP A, your analysis under your fifth test assumes that the removal of HIP A's wide MFN will not affect the commission that HIP A pays to MoneySupermarket.
A. Yes, it is on that premise.
Q. Right. That goes to an essential element of the theory of harm, does it not? You have seen that. An essential element of the CMA's theory of harm is that those commissions will be affected. Let me put it this way. If, as your analysis now allows, removal of the wide MFN allows a HIP to negotiate a better deal with CTM, so you allow that in your analysis, that would then increase its ability to negotiate a better deal with MoneySupermarket, would it not? You are not allowing for that in your fifth test.
A. If we look at the reality of the test, it is looking at -- as explained, you have got HIP A, a covered HIP, with CTM, and it is looking primarily at whether the commissions paid by a covered HIP to CTM changed after the removal, and it is using as a benchmark, originally we use all commissions in the market by uncovered HIPs, and including to CTM.

Now, the test here is stripping that out and saying, as Ms Demetriou pointed out, I now only look at does the commissions that HIP A is paying to CTM change relative to what that same HIP is paying to MoneySupermarket following the removal. So if those were to identically or materially move in the same direction, I would not see a difference.
Q. Thank you. I am going to move away from the five tests
now, and I want to look at common trends as a separate subject.

If we turn to your first report at page $\{\mathrm{A} / 5 / 137\}$, paragraph 7.52, you say that the common trend assumption is -- you explain it here, you say that it is:
"... except for the presence of CTM's wide MFNs and any other controls, HIPs with and without wide MFNs price in a similar manner."

Yes?
A. Yes.
Q. That is the assumption.
A. That is the assumption.
Q. It is about ensuring that the treatment group, covered HIPs, and the control group, non-covered HIPs, are properly comparable; yes? So that any differences in how the covered HIPs priced after the wide MFNs were removed can reliably be attributed to the effect of the wide MFNs being withdrawn.
A. I largely agree. A point is obviously I have other controls, but after you have taken account of other controls.
Q. I understand that. So after you have taken account -that is correct, and you do say that here, you say "any other controls".

If we turn to $\{A / 12 / 48\}$, this is the joint
statement, and I.1. Here I think you accept as a matter
of theory -- because you say "Agree to the theoretical point" -- that difference-in-differences analyses are not reliable unless the common trends assumption holds. I think you accept that as a theoretical point; yes?
A. Yes.
Q. Again, the reason why this assumption is important in general is that if the treatment group and the control group do not respond in the same way to changes in economic circumstances -- so let us call them shocks; shocks that affect both groups -- then any difference that you might be observing in your analysis might be wholly or partly the result of that different response rather than the problem that you are trying to -- the wide MFNs here, but the issue you are looking at. Do you agree with that in theory?
A. Yes, you need to have a relevant benchmark. That is the point of this common trends assumption.
Q. A common shock might be something like, for example, a change in the cost of providing insurance that affects all insurers in the market; yes?
A. Yes.
Q. The common trends assumption is the assumption that both covered and non-covered brands will respond to such shocks in the same way; yes?
A. Yes.
Q. Let us assume for the moment that the common trends assumption does not hold in the present case. I know that you disagree with that. This would mean, would it not, that it would be wrong to interpret the coefficients produced by your regression analyses as solely measuring the effects of the removal of the WMFNs, the wide MFNs, because the coefficients could also include other differences in the way in which the covered and non-covered brands set their prices; yes?
A. Yes.
Q. In other words, to put it another way, if the common trends assumption does not hold, your regression results will be biased.
A. Yes, I would -- they could still be quite informative. I would not --
Q. Okay. If we look at $\{A / 12 / 51\}$, this is proposition I.4, again $I$ think that this is common ground between you and Professor Baker, we see that you both agree.
"Any bias from a violation of the common trend assumption could go in either direction."

Yes?
A. Correct.
Q. When you say -- again, I think this is not controversial, but if we go to your second report,
\{A/9/149\}, where you say at -- I think you are saying this at 5.136. I think you are saying that, we see that, the words in bold in the citation, the "violation could bias the results in either direction", you accept that, do you not?
A. Yes.
Q. You say at 5.137 , so the next paragraph, that Professor Baker has not shown that potential violation of the parallel trend would bias the results towards finding no effect or understating the effect, and he has not commented on the direction of bias. You have not either, because you are working on the basis that the common trends assumption holds in this case; that is correct, is it not?
A. Yes, that is correct.
Q. If we can go back to $\{A / 12 / 48\}$, you say at I.1 that the market facts support the assumption that the common trends assumption holds as between the covered and the non-covered brands. You then say, if we go on to the next page $\{A / 12 / 49\}$, that it is common ground that covered and non-covered HIPs are part of the same market, so they could thus be expected to respond to common shocks in a similar way; yes?
A. Yes.
Q. But it does not always follow, does it, that because
competitors are in the same market that they will respond in the same way to shocks in the market? Because they might, for example, have different business models which means that they respond in different ways.
A. I think this is quite an uncontroversial and quite a sense -- uncontroversial point about this relevant market, but theoretically I am sure there could be a possibility where -- but in an economically defined market, where we are saying that they react, that they compete closely, I would expect them to respond to common shocks very similarly.
Q. We know here that -- because it is something you rely on yourself, so when it comes to promotional deals, you acknowledge that some HIPs have an appetite to do promotional deals and others do not. So you accept that they have different strategies, they may have different business strategies; yes?
A. Yes, but $I$ do not rely on the common trends assumption for my promotional deals, so it is not relevant there.
Q. I am just trying to tease out the relevance. I am really making a simple point about what you were saying in relation to your promotional deals analysis, because when we explored it yesterday you were saying that some brands may have an interest in doing promotional deals, but you were keen to emphasise that lots do not have an
appetite for doing them; yes?
A. Yes, the facts are that there was a difference in interest for promotional deals.
Q. Right. We see at least to that extent that there is a difference in business -- there may be differences in business strategies between different brands; yes?
A. So the common trends assumption does not require that everything is identical. It is all relevant to the test, your dependent variable. So I require this for relative pricing in commissions. That is why I am saying that promotions is -- I do not need them to be identical there.
Q. I think it is common ground, is it not, between you and Professor Baker that you can actually test for whether the common trends assumption holds as between the treatment and the control group; yes?
A. Yes, there are statistical tests that help inform that.
Q. The leads test is a help that can inform in relation to that.
A. Yes.
Q. What it does is it looks at whether the covered and the non-covered HIPs price differently during time periods before the removal of the wide MFN, so that is the leads half of the leads and lags test; yes?
A. That is right, yes.
Q. It is a zooming in, as $I$ put it, not very scientifically.
A. Yes.
Q. So it involves working out lead coefficients, does it not, at monthly intervals prior to the withdrawal of the wide MFNs?
A. Yes, in this case it is on a monthly basis.
Q. As with your main regressions, you look at whether these differences are statistically significant; yes?
A. Yes.
Q. You carried out leads tests in your first report, did you not, to test whether the common trends assumption held for your relative and absolute pricing analyses? That was annex 6A. I do not think we need to turn it up now, but you did that, did you not, in your first report?
A. Yes.
Q. Your conclusion was that you did not think that the common trends assumption was violated; yes?
A. Yes, so I did explain the statistical tests were a further piece evidence that supported the common trends assumption in those analyses.
Q. You know that Professor Baker -- let us go to his report, $\{A / 7 / 56\}$-- has criticised your leads analysis, as you know.
A. Yes.
Q. If we go to page $\{A / 7 / 56\}$, please, paragraphs 142 and 144. So paraphrasing again, he had two broad criticisms, did he not? He said first of all you had failed to account for the fact that some HIPs had their wide MFNs removed earlier than others, which could disguise leads; yes?
A. Yes.
Q. He said that you should remove the early treatment HIPs and redo the analysis so it only includes the main treatment group of HIPs who had their wide MFNs removed in December 2017; yes?
A. Yes, I did do that.
Q. You accepted that, so you did that.
A. Yes.
Q. Let us look at where you did that so that the Tribunal has it. If we go to $\{A / 9 / 150\}$, at the bottom of the page, 5.142 you say that -- you accept that it is a sensible approach and you have then implemented his suggestion; yes?
A. Yes.
Q. The second criticism that Professor Baker made was that you had only looked at leads in the 12 -month period prior to withdrawal of the wide MFNs; yes?
A. Yes, he raises that.
Q. You refer to this as a symmetric approach, am I right? I think it is because your main regression on relative pricing is looking for an effect 12 months after disapplication, and so you say there is no reason to look at leads more than 12 months before disapplication. Do I have that right?
A. Yes. My period of analysis is the 24 months you have described, so I want to see in that prior to the treatment whether there is a common trend.
Q. Professor Baker says, if we go back to his report, please, at $\{A / 7 / 56\}$, if we go up to the top of page $\{A / 7 / 57\}$ he says there is no reason to limit the leads in this way and he says you should look at leads throughout the 19 month relevant period because it is likely to be more instructive because you have more data; yes? That is his position.
A. His position is that, yes.
Q. He is right about that, is he not? Because the more data you have the better the analysis; is that not right? There is no reason to think that economic shocks in the market happen in any kind of symmetrical way, is there? So why do you not just look at whatever data you have and try to draw conclusions?
A. The point of symmetry, $I$ am not tied to symmetry here, I am saying that you should look at the period that you
are analysing. So I am using the 12 months before to help inform my counterfactual. I am not using time before that time. I am not using 13 to 19 or 20 -odd months before. What happens between the covered and the non-covered HIPs in that period is not going to affect my analysis, which is only -- it is not taking into account that data, so I do not need the common trend to hold in the period. That is not informing these estimates.
Q. You say that, but if there was a difference in the way that covered and non-covered brands responded to an economic shock, say 13 or 14 months before disapplication of the wide MFNs, that would be highly relevant, would it not, to whether the common trends assumption holds? Because what you are looking for is evidence whether or not these different groups respond in the same way to economic shocks.

Say there was an economic shock 14 months before the end of the relevant period, it is artificial, is it not, to exclude that? Because if it shows they did respond in a way, you would want to take that into the, would you not?
A. I think it is irrelevant.
Q. Irrelevant?
A. Yes.
Q. Right, so what if there is a big shock in the market 14 months before the end of the relevant period, and then the market is very, very stable so there are no real economic shocks, but we see that when that big economic shock happens that there is a very different reaction between the two groups. Is that not something which is relevant to whether the common trends assumption holds?
A. So my first thing would be to make sure I did not include that big shock in my analysis and stick to the time window that $I$ have done, which is not too long before and not too long after, to avoid such events sort of conflating the analysis.

There is probably a lot going on in this market, so I do not need to search for common shocks outside my analysis period.
Q. Let us have a look at what Professor Baker found. We are on page $\{A / 7 / 57\}$ and at table 10.

What Professor Baker has done here is he has adjusted your results, has he not, so they focus on the main treatment group; yes?
A. Yes.
Q. He also adds in what he has called asymmetric results, so he has focused on the full 19 months prior to disapplication, not just your 12-month period; yes?
A. Yes.
Q. First of all, you accept, do you not, that on the asymmetric approach this table shows that there are a large number of statistically significant leads for both your weighted and your unweighted relative price analyses; yes?
A. Yes, these are his results.
Q. You are not disputing the results, are you? You just take a different time period.
A. Again, $I$ am not verifying results that are outside my period of analysis. That is all I am caveating.
Q. I see. You have not checked them, but you are not challenging them.
A. Correct.
Q. On the absolute price analysis, we see that even on your symmetric approach there are a large number of statistically significant leads; yes?
A. Yes, and I acknowledge that in my report.
Q. What we see is six statistically significant leads. We see one lead for your symmetric weighted relative price analysis, six for your unweighted relative price analysis, on your symmetric approach, and more on the asymmetric approach; yes? Then we see the analogous symmetric and asymmetric results for the absolute price analysis on the bottom row, and there is ten
statistically significant leads for your absolute price analysis.

If we go to HR2, so your second report, at 5.143, so that is $\{A / 9 / 151\}$. If we go to 5.144 , I think this is where you acknowledge, do you not, that on your unweighted relative pricing analysis on your symmetric approach, there are six statistically significant leads. That is when you said a moment ago you acknowledge that, you note it; this is where you note it, is it not?
A. Yes.
Q. You agree that this could indicate a violation of the common trends assumption, do you not?
A. Yes.
Q. What you then do is look at the lead coefficients on each of your separate PCW-specific unweighted relative pricing models. We see that over the page on page \{A/9/152\}. You say that these results suggest that the common trends assumption holds; yes?
A. Yes.
Q. Can we then look at what you say about your absolute pricing analysis? If we go to 5.149 we see:
"... Professor Baker also reports the number of statistically significant leads for my absolute pricing analysis."

Then you say:
"... empirical tests for the common trends assumption should not be interpreted in isolation, and there is strong reason to believe that HIPs with and without ... MFNs would, but for the wide MFN, be comparable."

I think what you are saying there is that -- I think you are saying: well, do not worry about the results because I do not have a strong reason to believe that the common trends assumption is being violated, even though these results show that it might well be. I think that is your position; is that right?
A. Yes.
Q. Your relative pricing analysis, if these results do show a violation of the common trends assumption, as they appear to on their face, would be undermined by these results, would it not?
A. No, my position is the same for all the analyses. I noted at the front that the statistical tests can be informative, but they are not, in my opinion, decisive. I disagree with your description of my relative pricing test as -- of the common trends as however you put it. I think that these show that they are still a meaningful control group.
Q. Looked at, as you said earlier, with the other evidence in the case; yes?
A. Yes.

MS DEMETRIOU: Would you just bear with me a moment, Ms Ralston. (Pause)

Ms Ralston, you will be very happy to know, because you have been giving evidence for a long time and we all thank you, that $I$ do not have any further questions for you. I know that Professor Ulph has a question about the article, but I am going to sit down.

THE PRESIDENT: Thank you very much, Ms Demetriou.

Questions by THE TRIBUNAL
THE PRESIDENT: Could we bring up $\{\mathrm{F} / 565\}$, and then I will hand over to Professor Ulph and you can ask the question that you have in relation to this working paper.

PROF ULPH: Yes, thank you very much.

I would like to put four or five questions to you about this paper.

My first question relates to the model that they set out starting in section 2. That is at $\{F / 565 / 8\}$.
A. Yes, I have it, thank you.

PROF ULPH: The model is set out over a number of pages, but I just want to go through a list of factors that are contained in the model. I want to ask you do you agree that the model contains many of the features that are in play in this particular case, so let me just go through
the features.

Firstly, there are multiple providers of a particular product. There are multiple PCWs through which a provider of that product can be listed and sold. Providers can choose whether or not to list on a website.
A. I agree with all this.

PROF ULPH: Providers also have their own channels through which the products were sold.
A. Yes.

PROF ULPH: If providers do list on one or more PCWs, then they can in principle set different retail prices on different PCWs. Moreover, these can be different from the prices that they set on their own direct channel.
A. Yes, that is relevant to the current case.

PROF ULPH: If a consumer purchases a particular provider's product through a PCW, then the PCW would charge the provider a flat fee commission per unit sold?
A. Yes.

PROF ULPH: PCWs determine their commission rates?
A. Yes, so PCWs charge a commission rate, yes.

PROF ULPH: Consumers are not charged for the use of a PCW?
A. Agree, yes.

PROF ULPH: Consumers have preferences about both which product to buy and which channel to use, and so there is
both inter-brand and intra-brand competition in play here?
A. Yes, that applies.

PROF ULPH: PCWs can impose either wide MFNs or narrow MFNs on providers?
A. Yes, that is the case we have.

PROF ULPH: I would like to turn now to proposition 1, which is at $\{F / 565 / 13\}$.

There is a lot of algebra here, but $I$ am just going to try to say everything in words and see whether you agree with my interpretation for what this proposition says.
A. Okay.

PROF ULPH: Do you agree that this says that in the absence of any form of most-favoured-nation clause, either narrow or wide, that in any symmetric equilibrium the commissions charged by PCWs on the retail prices charged to providers are such that, first of all, all providers list on all PCWs?
A. Yes.

PROF ULPH: The commission rates charged by each PCW to each provider is the same?
A. Yes.

PROF ULPH: So it just reflects the symmetry assumption. All providers charge the same retail price on their own
direct channels? Again, that is reflected in the symmetry assumption, and the common --
A. Yes, yes, there is a --

PROF ULPH: Yes. All providers charge the same retail price on all PCWs?
A. Yes, that is what the paper finds, yes.

PROF ULPH: However, the common retail price set on PCWs is higher than the common retail price on direct channels by a factor that depends on both the common commission rate and the degree of inter-brand and intra-brand substitutability, so there is a higher price on PCWs than on direct channels?
A. Yes.

PROF ULPH: Do you agree?
A. Yes, that is the term they have at the end, yes.

PROF ULPH: Can we now turn to proposition 2 which is at \{F/565/17\}. Do you agree that what this proposition says is that if all PCWs charge wide MFNs on all providers, then in any symmetric equilibrium the commissions charged by PCWs and the retail prices charged by providers are such that, first of all, once again all providers list on all PCWs?
A. Yes, they find that.

PROF ULPH: The commission rate charged by each PCW to each provider is the same?
A. Yes.

PROF ULPH: All providers charge the same retail price on their own direct channels?
A. Yes, that is --

PROF ULPH: Yes?
A. Yes.

PROF ULPH: All providers charge the same retail price on all PCWs?
A. Yes.

PROF ULPH: Now there is price parity, because the common retail price set on direct channels is exactly the same as the common price set on all PCWs?
A. That is what they find, yes.

PROF ULPH: Yes. However, the price set on direct channels is now certainly higher than it would have been in the absence of any most-favoured-nation clauses, because the price now, the first term of that price is the same as in proposition 2, and now there is a second term which is positive. So now the price set on direct channels is higher than in the absence of any wide MFNs?
A. Yes, I have not directly compared this PW to P asterisk previously, but it --

PROF ULPH: Can we just go back to proposition 1?
A. Yes, that was --

PROF ULPH: Can we go back to page $\{\mathrm{F} / 565 / 13\}$.

You see there that the common price on the direct channel is 1 minus theta over two minus theta?
A. Yes, so the difference in the price is now as -- oh, I see, yes.

PROF ULPH: Is a higher --
A. Yes, I can see where you have drawn that inference, Professor, yes.

PROF ULPH: So the price has gone up. However, do you agree that whether or not the common price set on PCWs is higher or lower, in the absence of any wide most-favoured-nation clauses, ie as determined in proposition 1 , is a lot more subtle and depends on the intensity of inter-brand and intra-brand substitutability? I do not know whether you have had time to reflect on that.
A. Yes, I thought that is what you were asking my opinion of already. The two terms do differ, and of the platform price now, as I am sure you are aware. The first term is the same, it is $P D$ in the prior and now it is the same. In the second term, in the new world you have two-thirds times the commission, with the same denominator as before, and then in the old world, before parity, we just had the commission divided by the denominator. So on the one hand, in the new world we have two-thirds of something, so it is lower, just
talking it out loud, but in the new world we have also got a new commission fee, $I$ am not sure if that has gone up or down, so I like your description of the impact would be subtle, and $I$ would want to read what the authors have said about what direction that went in. PROF ULPH: All right. Could we now turn to proposition 3, which is at $\{F / 565 / 25\}$.

Do you agree that this proposition says that if all PCWs impose narrow MFNs on all providers, then the outcomes in terms of equilibrium commissions and retail prices charged is exactly the same as in proposition 2 , where it is only wide MFNs that are in place?
A. Yes, and I followed through there their intuition, when reading the paper myself, as to why that occurs.

PROF ULPH: Okay.
A. Do you want me to talk about that? I can agree with the proposition if it is useful for the room.

PROF ULPH: Okay. Carry on, give your interpretation.
A. My interpretation of the model, I might step back, is -right, so the way they think about it is you have a price comparison website offering -- demanding a wide MFN to insurers, and the insurer is thinking: do I accept this wide MFN and accept that restriction on my pricing? They think about what the other insurer will do, and they are thinking: well, if that other
insurer -- there is two insurers in my simple world -if that insurer has tied its hands to price on the two platforms the same, if $I$ refuse the wide MFN I miss out on selling on platform $A$ because they are the one demanding the MFN, but I can undercut my rival because I will set a price which is below what they can afford to do because they have to pay the commission on both platforms.

So what is important here is that it is credible to not list on one of the two platforms, and when that is the case -- so you have got a couple of things at play. One that is at play is how many of the second insurers' customers will switch to you if you undercut it by a small amount on platform $A$ and also on that direct channel. If that is strong, then there is a strong incentive to reject the wide MFN so that you give up platform -- I may have got my platforms muddled, but you give up the wide MFN's customers to gain all of the other platform's customers at that only marginally lower price. That is why the intensity of that competition between the insurers is relevant, that they are willing to forsake the wide MFN platform's custom to steal the share on the other. The link to narrow MFNs is because they also steal the share -- effectively there is three channels' customers. Some will be going to the direct
channels, some will be going to platform $A$, some to $B$, and you can steal the direct consumers as well, and it has to be credible that you are willing to steal those customers.

So if you have narrow MFNs in place, that is sufficient to stop you wanting to -- or it has the same effect of wide MFNs as well.

PROF ULPH: So would you agree that one application, taking all these results together, is that there are circumstances under which, compared to the counterfactual of a world in which there is extensive use of narrow MFNs by all PCWs against almost all providers, compared to that counterfactual, there may be circumstances under which (inaudible) the wide MFNs creates no harm?
A. Yes, and I have seen Thibaud Vergé, one of the authors, and that is his main conclusion from this, that wide MFNs are not necessarily bad, but if they are bad then they are no worse than narrow MFNs.

PROF ULPH: So would you agree that given that in this case all parties agree that both in the actual situation where there is a wide MFN, and in the circumstances of narrow MFNs, and in the counterfactual where there is no narrow (sic) MFN, but there still exists a wide range of narrow MFNs between PCWs and providers, since that is
the counterfactual, then one would try to draw conclusions about the anti-competitive effects of the wide MFN, first of all it is very important to be clear what is in the counterfactual, in this world of narrow MFNs or no MFNs at all, and would you agree that it is also important that if you want to articulate the effects that wide MFNs might have, you have to take into account the presence of narrow MFNs between PCWs and virtually all providers?
A. Yes, that is the message from this paper.

PROF ULPH: I understand that we do not have a case in which we are trying to rule on the anti-competitive effects of narrow MFNs, and I know the CMA's case is that they do not regard narrow MFNs as being themselves anti-competitive or creating anti-competitive harm, but given that they are in the counterfactual we do need to take them into account in thinking through what the likely effects the wide MFNs would have. Would you agree with that?
A. Yes, we should think -- that is the counterfactual they have defined, is one with narrow MFNs, so we should look for incremental effects.

PROF ULPH: Thank you very much. That was all I wanted to ask you about.
A. So I think my empirical analysis will do that. It is
looking for an incremental effect above and beyond narrow MFNs, because to the extent that narrow MFNs cover all the control group that has been the approach I have taken. I have looked for that incremental effect.

PROF ULPH: Okay, thank you, Ms Ralston.

THE PRESIDENT: I take it that you have not done the exercise of assessing what the position would be if you took out all favoured nation clauses, wide and narrow?
A. I would not have a control group for all that empirical work. The effective coverage is just looking at things over time. I am thinking this out loud now, but that would still apply. But yes, the econometrics is using basically narrow MFN HIPs as a control group. I mean, there are the few instances where some of those did not have narrow MFNs either, but generally speaking mine is looking for that incremental effect.

THE PRESIDENT: Thank you.

Ms Demetriou, do you want to ask any questions arising out of that?

MS DEMETRIOU: No. I am not going to ask questions of Ms Ralston in relation to this. Obviously it is a point that we can take up in our submissions.

THE PRESIDENT: Yes, indeed. Thank you very much.

Mr Beard, we will hand over to you.

MR BEARD: I do have one or two questions, but before $I$ do, just before $I$ forget on the transcript, and just to confirm with Professor Ulph -- I do not know, Professor if you actually have the live stream transcript in front of you or not.

PROF ULPH: I do, yes.
MR BEARD: If we could scroll back to [draft] page 141 you see you ask a question starting on line 15 -- I am sorry, I know I am not supposed to be asking questions of the Tribunal, but it is just a correction $I$ think. You say $\{$ Day9/142:20\}:
"So would you agree that given that in this case all parties agree that both in the actual situation where there is a wide MFN and in circumstances of narrow MFNs and [I think it is] in the counterfactual there is no ..." I think it should be "wide MFN" there; is that correct?

PROF ULPH: Yes, you are right, yes. You are right.
MR BEARD: I thought it was easiest to pick it up now, when I could actually ask you.

THE PRESIDENT: That is helpful.
PROF ULPH: I misspoke.
MR BEARD: No, it is fine. I think the gist of the question was absolutely clear to all concerned, but it was just the number of narrows and wides that were in the chunk
of text. I thought I would pick it up and tidy it now. PROF ULPH: It has been a long day.

THE PRESIDENT: Let us check your answer:
"Yes, that is the message from this paper."
A. Yes, I do not have the transcript.

MR BEARD: To be fair, I do not think -- well, look, I can provide the transcript and her answer to it, but I will have to read through the questions again. I think everyone worked on the basis that Professor Ulph had said "wide" at that point, and we all understood the question in that way, that in the counterfactual we were taking the wide out. Now, obviously I can provide the transcript for Ms Ralston. Her answer makes sense using "wide" there, and I was therefore only correcting the transcript, but $I$ will happily provide it to Ms Ralston.

THE PRESIDENT: If you are satisfied that we do not need to --

MR BEARD: I do not think we do. If Ms Berridge looks at it and says I have erred, then I will come back to it, but I do not think so, if that is okay. Re-examination by MR BEARD

MR BEARD: I do have one or two questions in re-examination, one of which may be slightly longer than the others. It may feel like a very long time ago, it actually is. Can we have up on the screen from your first report
$\{A / 5 / 83\}$, paragraph 5.33.
This is a paragraph Ms Demetriou had enormous fun with, the term "mixed".

Could you read through that paragraph, please.
A. Which one again?
Q. 5.33.
A. (Pause) Yes.
Q. The first sentence is:
"If the qualitative and empirical evidence, overall, suggests that an insurer was not influenced ... during the Relevant Period, then I consider that it is more informative to exclude that insurer from the market coverage. Where the evidence is mixed, I have taken a conservative approach and included the insurer in the market coverage."

I just want to understand what you meant by "overall" in those circumstances. Were you referring to a situation where all the evidence pointed in the same direction or was it assessing a balance of evidence, or what were you doing there?
A. I was using the word "overall" in the normal sense, looking at all the evidence, the qualitative and empirical evidence overall.
Q. And reaching an assessment.
A. And reaching an assessment, yes.
Q. When you talk about -- when you use the term "mixed", is that referring to the overall assessment that you are referring to in the first sentence?
A. I am referring to -- and this is live, so the three insurers that $I$ have included in coverage.
Q. Thank you. Could we go down to paragraph 7.21 in this report, which is at page $\{A / 5 / 129\}$ in the same document. Thank you.

$$
\text { If you could just read } 7.21 \text { and } 7.22 \text {. (Pause) }
$$

A. Yes.
Q. You recall you were asked about discussions you had with ComparetheMarket and questions were asked who you discussed with and so on. Just so I understand, prior to yesterday's cross-examination, had the CMA at any time or indeed Professor Baker ever raised any questions about those discussions?
A. No.
Q. You were taken to a document -- and I am not going to bring it up because $I$ think it was confidential -- about differences in question sets or the time taken to complete them between PCWs and HIPs.
A. Yes.
Q. Is it the difference in question sets between PCWs and HIPs that we are interested in in this context?
A. No, no, we are looking at pricing between PCWs, so only differences between question sets between the PCWs.
Q. In your second report at table 4.3 -- again my notes are wrong in relation to the reference, table 4.3 is on page 102 of $A / 9$ \{A/9/102\} -- you will recall you were asked a couple of questions about what $I$ will refer to as Legal \& General. I think you have the key in front of you.
A. Yes.
Q. Since we are in open.
A. Okay, yes.
Q. Yes?
A. Yes.
Q. You recall that. Do you know when Legal \& General entered into its wide MFN?
A. Wide MFN?
Q. Yes.
A. No, not off the top of my head.
Q. That is fine. Do you know whether the promotional deal that we were talking about or you were being asked about in relation to Legal \& General was a single deal, multiple renewals, multiple deals, whatever variation there might be?
A. No, I think it was one, but I would want to check the data.
Q. Thank you. Could we call up document $\{F / 624 / 32\}$.

This was a Commission document, you were being taken to paragraph -- particularly paragraph 93, but you had cited paragraph 92 of this document.
A. Yes, that is correct.
Q. You were asked about -- the question was raised about proportionality of an exercise in relation to econometric analysis of data.

Has the CMA, as far as you are aware, done any sort of similar analysis to any of the econometric exercises you understood in your first report and augmented in your second report, not in this investigation but elsewhere?
A. Oh, have they -- yes, they have undertaken econometric analysis of the effects of wide MFNs.
Q. Where did they do that?
A. They did that in the DCT market study. They looked at the impact of wide MFNs on the commissions of price comparison websites when they removed the wide MFN from motor, and that preceded this investigation, and that was the basis of one of my models, I took the same model and applied it to home insurance here.
Q. You have obviously been cross-examined on various of your econometric analyses. I think you may actually have answered the first of these questions in discussing
matters with Professor Ulph, but in relation to the econometric analyses that you have carried out, is the outcome of any of that analysis dependent on the analysis you put forward earlier in the report in relation to market definition?
A. No, I take the narrow view. I just look at the impact on the narrow PCW market, because if $I$ do not find an effect there then in a broader market there would be even less of an effect.
Q. Is any of the outcome of your econometric analysis dependent on the analysis you put forward in relation to what is called effective coverage?
A. No, again, I took the CMA's approach of this wide MFN having this effect, so I just looked at wide MFNs per se.
Q. I am going to ask you a couple of questions here which are probably not orthodox re-examination, they are not leading, but $I$ wonder if -- they refer to one or two of the terms that have been used in some of the discussion that I thought given the way in which cross-examination proceeded it might be actually helpful for Ms Ralston just to explain.

The first of them was in passing you referred to an "R squared". To the uninitiated, and indeed to me, an R squared is something $I$ find quite confusing to cope
with. I wonder if it is worth you explaining to the Tribunal what an $R$ squared is and what the significance is of it.

I know there are tables in your report, but perhaps it is just useful to do that, and if you want to direct the Tribunal to any of your material, please do.
A. Yes. I am going to -- so $R$ squared at a conceptual level, and Professor Ulph will I am sure be very familiar with this, but this is a way to capture the unexplained, the unexplained variation, so you try and explain much of your dependent variable, the left-hand side, with the stuff on the right-hand side, and what is left is called unexplained, and the $R$ squared captures that, and it is out of zero to 1 or zero to $100 \%$, however you measure it.

The programmes economists use to run statistical tests spit this out, for want of a better word, just so you know what you have produced, and I have done a type of model where you have fixed effects. So my -- the first number that is produced from this, from the statistical software, does not actually account for all of what you have explained, because it did not account for the fixed effect variable. This was noted by Professor Baker, but he points to my $R$ squareds as if they are quite low and my models are not very good,

I think they were very low when you do not account for these fixed effects.

So in my second report $I$ did the -- I call them adjusted $R$ squared, $I$ think, but they are actually the true $R$ squared, I have not changed anything, but actually this is the 65 to $80 \%$ metric I have referred to a few times. So that means I have explained 65 to 80\% of the variation in relative pricing, or $60 \%$ in the case of commissions, based on all the things on the right-hand side of my model.

MR BEARD: I do not know if the Tribunal wants to follow up with any particular questions on that.

THE PRESIDENT: Just to be clear, the significance of the size of the $R$ squared variable is that the bigger the number, the less the other parts of your model explain and, therefore, the worse in a sense the model is, whereas the lower, the more is explained by the variables that you have assigned specific roles to.
A. Yes. So in very simple terms, with a very simple regression, you may have seen scatter plots of the dots, and the regression is putting a line of best fit, that is what it is called, and the $R$ squared is capturing the gaps between your dots and your line of best fit, and what is unexplained is those distances. So you can add it all up and then you say overall I have explained,
you know, my dots are quite close to the line when the R squared is high, close to $100 \%$, or if you did not have that you would infer that your line of best fit was in the middle, but it was not really explaining all the dots in your chart.

THE PRESIDENT: You square it to get a -- why do you square the R?
A. So I would want to remind myself of the exact equation, but I think it will be because you have negatives and positives of the distances, and just to square it.

THE PRESIDENT: Of course, get rid of the -- yes.
A. I have to admit that you take these formulae for granted at a certain point and just refer on the statistics coming out of the computer.

THE PRESIDENT: Thank you.

MR BEARD: It is obviously a matter for submissions, but I think the point is that it is the higher the $R$ squared and the lower the $r$ squared more explanatory variable, explanatory (inaudible).

Unravelling, if $I$ may. If we could go to $\{A / 9 / 61\}$ at paragraph 3.25. If you want to remind yourself of what you said in 3.25 .
A. I know, yes.
Q. So in cross-examination Ms Demetriou was hoping to get you to agree that unravelling was dependent on
homogeneity, and took you to the Inderst \& Maier-Rigaud paper. Can you just explain the significance of homogeneity as far as you are concerned in relation to this notion of unravelling, please?
A. As the sentence continues in my third bullet, it is about -- talking about price competition and I refer to undifferentiating -- undifferentiated price competition. I am just saying that here there is strong price competition between the insurers and that is one factor that results in this unravelling. Because, as we described in Johansen \& Vergé's paper, if you can undercut your rival by a little bit and steal their share, you do it, you forsake the wide MFN and these incentives. Prices just cannot be sustained above the competitive level.
Q. Right, thank you. You mention competitive level. A couple of quick questions on that. As far as you are aware -- it is a concept you refer to at a number of points -- did the CMA do any work in the Decision identifying whether retail prices charged by HIPs were or were not at a competitive level?
A. No.
Q. As far as you are aware, did the CMA do any work in the Decision identifying whether commissions charged by PCWs were or were not at a competitive level?
A. No.
Q. There were a number of discussions about commissions that have come up over the past few days. Could you just very simply and relatively briefly explain overall what you were doing in your econometric analyses on commissions, please?
A. Yes, I did two models. As I mentioned, the CMA had done some econometric analysis of commissions on motor insurance, so I took that model which -- that is this all PCW model, and then $I$ did a separate one which was CTM-specific. I pause because it is easier sometimes to start small and get big.

So the CTM model looks at CTM's commissions for covered insurers benchmarked against non-covered insurers and sees if that changed after the removal of the wide MFN, and I use a time period of -- I have 2018, 2019 and then in the end 2020, I think, quite a period. So that is that model. So you are benchmarking just within the CTM world how formerly covered insurers' commissions changed relative to those non-covered, and I think, although $I$ know my results are all statistically insignificant, but in that event the presence of the wide MFN resulted in lower commissions, so contrary to any concern.

Then the all PCW model timeses that by four.

Effectively you are doing all four PCWs, so it gets a bit confusing when you try and break it down, but it is looking at the removal of GoCompare's, Confused's, MoneySupermarket's and CTM's wide MFNs, and they all occurred at different times. So we have lots of events, which we like as statisticians because we have lots of events to see what the effect was, and whenever a wide MFN was in place, that has a 1 in the analysis and a dummy variable but when there is a 1, and then it is zero otherwise. So that is why it got a -- it is a bit hard to explain, but you can use MoneySupermarket's commissions with its insurers as a benchmark for GoCompare's commissions to its insurers, because you are always looking at them in tandem and see if they change when, for example, GoCompare removed its wide MFN. So that is that analysis.
Q. Thank you. Just going back to the CTM only analysis, does that analysis make any assumption about MoneySupermarket commissions?
A. No, no, it is CTM data only.
Q. Thank you. Just in relation to -- can we go to \{A/9/113\} of your second report.

You have been asked various questions about various of the tests you carried out to test whether or not there were spillovers, and this is the section of your
report, second report, dealing with spillover bias.
Could you just summarise for the Tribunal what the dispute is between you and Professor Baker in relation to spillovers and what you consider to be the essential point, critical point, in that dispute? I am sorry, that is quite a general question given all the material.

MS DEMETRIOU: Sir, it is not really a re-examination
question. It is an invitation to talk generally about the subject matter, and it is not really an appropriate way to go about re-examination. If there is a particular point arising out of the question $I$ put and an answer that was given that is fine, but this is: let us revisit the whole thing. I do not think that is appropriate at all.

THE PRESIDENT: We are not going to have a revisiting of the whole thing.

MR BEARD: No.

THE PRESIDENT: For my part, I think a short portion of the transcript just explaining this witness' perception of the difference would I think assist.

MR BEARD: Sorry, I should have been clear. As I was saying earlier, $I$ recognise this is not totally an orthodox re-examination, but it is just given the density of the material that we are dealing with that $I$ was posing these questions. I am trying to pose them openly as
well, so I am not leading the witness. I entirely take Ms Demetriou's point that this is not orthodox, but I just invite Ms Ralston to very briefly deal with those issues, if you would not mind.
A. So Professor Baker has a table in his report which shows that if there was -- he actually shows an identical effect on the control, the non-covered HIPs. Then that would also explain the absence of an effect in my analysis.

So I explain -- so I do not find that there is a theoretical basis for spillovers, and then I explain that even if there were a spillover, it would be very -well, I draw on the literature to say it would be less than $100 \%$, so I would detect it. That was what we were talking about, that it would underestimate my estimate of the effect, but nonetheless it would be so much lower than $100 \%$ I would pick it up.

Then we talked about five tests in which, in
addition to that principal point that you would still see some effect if it was material, we just underestimate it, ways in which I would further isolate my estimated effect of the wide MFN from any contamination from spillovers.

In terms of a summary, we will not go through them, but there is a very short summary of my test in the
joint statement, if that was convenient for you.
THE PRESIDENT: Thank you.
MR BEARD: I am grateful. I am just going to pick up one question in relation to one of those tests. It was the lags test, and there was a discussion about how the lags test would not pick up spillovers if the average change month on month were to be the same, $I$ think is the way it was put.

Are there any reasons why we would or would not expect the average to be such that the lags test would not detect any change?
A. Yes. I think there are strong reasons why, if there were to be an effect, it would be bigger on the HIPs who formerly had a wide MFN, so you would pick that up in the test. Because if you are already free to compete as you want, the non-covered HIPs -- and there is already competition, so this is going back to my unravelling, my articulation on unravelling, there is already competition in most of the market, so I would not expect there to be much change in behaviour after the event that does not directly affect them.
Q. Thank you.

I have one further question, actually. You were asked lots of questions about evidence. Does Oxera have any statutory powers to gather evidence from insurers?
A. No.

MR BEARD: I thought I knew the answer to that one.

I do not have any further questions for the witness, thank you.

THE PRESIDENT: Professor, any questions?

PROF ULPH: No.

THE PRESIDENT: Ms Ralston, thank you very much. You are released, with gratitude. Thank you.

MR BEARD: Sir, I am conscious of the time. I think now might be the appropriate time for a short break.

I think it has been a long day for all concerned, I know we are moving to a new witness, but I have had a discussion with one or two people in the court and I think it would be better to finish at 4.30 if we could today, if that were possible. I recognise we will not start before 10.30, and I will make sure that although I will not get perhaps that far this afternoon, I will make sure I try and speed the plough tomorrow. I recognise the Tribunal's kind indulgence on timing, but I think we should be able to get through things tomorrow even on that basis, and I think that would be better for all concerned, if we may.

THE PRESIDENT: We are in your hands. Thank you very much. We will resume at 3.10 .
(3.01 pm)
(A short break)
(3.14 pm)

MS DEMETRIOU: Sir, we have taken the liberty of asking
Professor Baker --

THE PRESIDENT: No, of course, we will have you affirmed, Professor, and then we will proceed.

PROFESSOR JONATHAN BAKER (affirmed)
THE PRESIDENT: Professor, do sit down, make yourself comfortable. I hope you have a clean glass of water there.
A. I hope so. I hope that was clean over there; I found it.

THE PRESIDENT: Very good.
Welcome, and I will hand you over to Ms Demetriou in a moment.

You will see that we are in part hybrid in that Professor Ulph is attending remotely, so you are in a somewhat difficult position in that you have got to address a wide circle of people, but $I$ am sure you will manage that, but do bear in mind that the professor is attending remotely.

Other than that, I will hand you over to Ms Demetriou who will ask you a few questions.

Examination-in-chief by MS DEMETRIOU
MS DEMETRIOU: Thank you, sir.

Just a preliminary matter. As Ms Ralston took hard copies into the witness box of certain documents, Professor Baker has done the same thing, and we have shown them to my learned friend. They comprise Professor Baker's report and the joint expert statement, and also the letter of advance cross-examination -notice of advance cross-examination which appended his proposed second report which is in the bundle, so he has all of those in unmarked copies with him for ease of reference, and my learned friend does not object to him having them there. I think he wants to make a comment.

MR BEARD: No, I do not object to them being there. I think we need to be clear that the second report is not admitted, and this is not a vehicle for having it admitted orally in chief or by whatever means. I am not trying to mess with Professor Baker having some copies of material in front of him.

THE PRESIDENT: No, that is absolutely fine. Thank you.

MS DEMETRIOU: Thank you.

If we could turn to Professor Baker's report at $\{A / 7 / 0.1\}$ Professor, you should see it on the screen and I know you have a hard copy there, but is that the front page of your report?
A. Yes, it is.
Q. If we could go in the same tab to page $\{A / 7 / 61\}$, that is
your signature there, is it not?
A. Yes, it is.
Q. Could we go to page $\{A / 7 / 63\}$. This is the first page of your CV that we see. That is right, is it not? We can see that you were chief economist at the Federal Communications Commission from August 2009 to May 2011. If we go down we can see that you were director of the Bureau of Economics of the Federal Trade Commission from 1995 to December 1998; yes?
A. That is correct.
Q. If we go over the page, please $\{A / 7 / 64\}$ we see under the heading "Education" that in fact as well as having a PhD in economics you are also a lawyer.
A. That is correct.
Q. We then see a list of your publications, including a recently published book, "The Antitrust Paradigm". Then if we could go to page 16 -- it is not 16 actually on the bundle, it is $\{A / 7 / 78\}$-- we see the heading "Testimony" at the bottom of the page, and we see over the page the cases in which you have acted as an expert in the United States. That is right, is it not?
A. That is right.
Q. We see there a reference to deposition testimony, and of course the procedure in the United States is slightly
different to the procedure here, is it not, and I think it is right that you have never given evidence in English proceedings before?
A. I have never given evidence in English proceedings.
Q. What you will see in a moment is the way we do things here is that Mr Beard is going to stand up and try and make you feel like you have not accomplished any of these big achievements in your life. It is unlike the deposition process. So we have a different procedure, and you have seen that because you have been in court while I have been cross-examining Ms Ralston, so you have seen broadly how it works.

Can we go to $\{\mathrm{A} / 7.1 / 1\}$, please. This a letter containing some minor corrections to your report, is it not? The letter was sent to BGL's solicitors and also to the Tribunal, and these are corrections that you would like to make -- that is right, is it not? -- to your report.
A. That is correct, these are corrections to my report.
Q. Subject to these corrections, are you satisfied that your report is true to the best of your knowledge and belief?
A. That is correct.

MS DEMETRIOU: Thank you very much. I am going to sit down and hand over to Mr Beard. Cross-examination by MR BEARD

MR BEARD: Good afternoon, Professor Baker. I should say at the outset I am not going to in any way deprecate your qualifications, experience or anything of that sort. Indeed, I saw your book; I have not finished it yet, but it was very interesting, so thank you very much. I might come back to that in a moment.

I want to start out with some mundanities, not anything technical at all. Could we have page 6 of Professor Baker's statement/report on the screen $\{A / 7 / 6\}$. Thank you so much.

You summarise your instructions in 17:
"... I was asked by the CMA to evaluate the analysis and conclusions in Sections 2, 3, and 5 through 9 of Ms Ralston's expert report, and to evaluate whether Ms Ralston's analysis undermines the CMA's analysis and conclusions on the competitive effects of CTM's wide MFNs. In doing so, I was asked to take as a given the conclusions in Section 5 of the CMA's decision on market definition and market power."

So you were not asked to analyse anything to do with market definition and market power or you just took those conclusions as read; that is correct?
A. That is correct, I was not asked to opine on that.
Q. Then:
"I was instructed not to opine on whether adverse competitive effects nare 'appreciable' under the legal standards governing this appeal." Just to be clear, none of what we are talking about here is going to appreciability, that was your instructions; correct?
A. I was not asked to opine on whether the competitive effects are appreciable, that is correct.
Q. Thank you.
"Material facts on which this report was written are taken from the CMA's decision, Ms Ralston's expert report, and analyses performed by the CMA's staff at my request in order to evaluate and respond to aspects of Ms Ralston's analyses, as referenced in the body of this report. I do not list every source of information I reviewed, but throughout my report I reference the sources on which I specifically rely."

Then you have citations.
Then if we could go down to page $\{A / 7 / 13\}$
footnote 28, you say -- and this is in the context of a particular issue about whether insurers who had wide MFNs actually complied with them. You say:
"I did not independently review the relevant provider testimony to referee any differences in interpretation between Ms Ralston and the CMA."

You said earlier, in 18, that the material facts on the basis of which this report is written are taken from the CMA's Decision. You say in footnote 28 you are not, as you put it, trying to referee testimony. Is it right that essentially all of the factual analysis that you rely on in this report is essentially using the CMA's appraisal of evidence in its Decision; is that fair?
A. It is fair to say that $I$ took -- I was asked to take the facts as found by the CMA and accept them and work with them. I think I recall that there were occasional times when there might be a number or something like that that was in Ms Ralston's report that $I$ happened to see it there and might have worked -- you know, used it at some point when -- not because it was different from something I saw in the Decision but because I had not seen it there and it did not seem controversial. But for the most part, I accepted the CMA's findings as correct.
Q. Right. For the most part. So just to confirm, did you look at any of the underlying material, such as responses to what are known as Section 26 notices or contemporaneous documents?
A. Occasionally they have come up during this hearing, and so I would see them when we had -- when you were having conversations about them or I read the transcript. But
if you are asking about when $I$ prepared my report, I do not recall doing -- well, let me be careful. I think I occasionally -- I think it is possible that once or twice $I$ was discussing an issue with the CMA staff, and it is possible that $I$ was -- I saw something in connection with that, perhaps numbers or something like that, but $I$ just do not remember in any serious way looking at the testimony that you are referring to.
Q. Just to be clear, you did not look at the nature of the questions that the CMA had asked under those Section 26 notices where it has statutory power to make enquiries, you did not look at any of that?
A. That is correct, unless it came up in the past three days.
Q. Yes, I am so sorry, I should be clear. In preparing your report, you did not look at any of that material?
A. I did not look at any of that material in preparing my report.
Q. Therefore, you have not commented in any way on the way in which the CMA has gone about its business gathering evidence or what they might have missed or whether questioning was ambiguous; is that fair?
A. I did not look at those questions, and I do not recall saying anything about them in my report.
Q. Did you look at any of the other previous market studies
that the CMA had undertaken in relation to insurance matters before you wrote your report?
A. No, I have not looked at those.
Q. Did you look -- you did not in particular look at the DCT, "Digital comparison tools market study" in relation to these matters?
A. That is correct, I did not look at that study.
Q. I see. Could we just have $\{B / 16\}$, please.

This is paper E to the "Digital comparison tools market study", and you just said you did not look at this at all, and you have not referred to it in your report I should be clear.

No one at the CMA had mentioned this to you prior to the writing of your report?
A. I do not think that is correct, because I believe it might have come up in conversation.
Q. But you did not look at it.
A. I do not recall looking at it.
Q. No. Have you been directed to it since you have written your report?
A. No, I have not.
Q. Could we turn through to appendix 2 in this document, which $I$ think is at page $B / 16 / 49$ but $I$ may have that reference wrong. I am wrong.

Whilst we are just finding the reference, you were
unaware that the CMA had felt able, in the context of the DCT market study, to carry out detailed econometric analysis in relation to the motor insurance market, you did not know that?
A. At what time? I assume counsel is asking me at the time I knew?
Q. Prior to writing your report, Professor Baker.
A. I think it is possible -- I think it is possible that I knew that before writing my report, because I think Ms Ralston referred to it in her reports and so $I$ would have known through that.
Q. Understood. $\{B / 16 / 95\}$. I am impressed, the EPE is ahead of even Ms Berridge in finding the documents. If you want to come and do questions, I am very happy. So you were aware of the DCT report because it may have been mentioned by Ms Ralston. You do not mention it in your report, and you did not go and look at appendix 2 , the econometric analysis that is dealt with here?
A. That is correct, I have not looked at appendix 2.
Q. So you opined in relation to these matters without the CMA having emphasised or made clear to you that they had in fact carried out detailed econometric analysis on commissions in the motor insurance market before you wrote your report?
A. I did not know what analyses, econometric or otherwise, the CMA undertook in this report when $I$ was writing mine.
Q. So the answer to the next question is obvious: you did not know that they had carried out that econometric analysis in relation to the motor insurance market relying on consumer intelligence data; you did not know that either.
A. Assuming that is true, I might have known it if $I$ had read it in something Ms Ralston had written, but I do not recall what she said and whether I knew it through that route. But that would have been the only route I would have known.
Q. Let us just clarify that. One of the points we will come back to later is the data set and issues of robustness in relation to data. Are you saying that you did know that there was a report, an econometric report, on motor insurance dealing with consumer intelligence data prior to you writing the report?
A. No, I am saying I knew there was a -- I believe I knew that there was a report dealing with whatever this deals with, to the extent Ms Ralston told me, but I don't recall knowing whether -- what data was involved, and it is possible that Ms Ralston mentioned it, but if she did, $I$ don't recall.
Q. I am sorry, I may have misspoken. I referred to it including relying on consumer intelligence data. I am going to come back that issue. But you are not aware of any of those matters?
A. I am not aware of the data that was used in the report I have not read, that is correct.
Q. Just for completeness, I think in theory I know the answer to this, you did not look at the FCA report into general insurance and the relevant policy paper 21/15 -actually, we will just call it up, it is $\{B / 26\}$, just have the front page.

That is May 2021, so you would not have been able to have it before you wrote your report, I do not think, but did you look at that subsequently?
A. No, I have not looked at this report.
Q. Could we just go to $\{B / 28\}$, please.

This a research note, 28 May, again after your report. Again, you were not directed to and you did not look at that at all?
A. I have not looked at this.
Q. Thank you. Can I just check something else? Could we go to $\{D / 18.1\}, p l e a s e$.

Did you look at the terms of the wide MFN clauses that we were focused on here in promoting your -- in you preparing your report?
A. While I was preparing my report I asked for an example of a wide MFN clause to read, and I did read that at the time. I do not know if it is what is on the screen, but I did look at something.
Q. You do not recall which clause it was that was provided to you?
A. That is correct.
Q. If we could just go to the next page here, please \{D/18.1/2\}. This is the essentially agreed set of wide MFNs that were provided to the Tribunal.

Could you just cast your eye over the right-hand column, second full row, the non-blue row, was that the clause that was provided to you, do you recall? Does it look like it? I recognise this may be a particular cruelty trying to recall these things, but $I$ am just trying to see whether or not $I$ can find out whether you had seen this.
A. I do not recall whether it is what $I$ saw before or not.
Q. I am not going to ask you then to read the next one. The next one is another version, but I am guessing the answer will be the same, you do not recall.

Well, you do not recall the clause that you looked at, but can we just talk in general terms, then, about what you consider to be prohibited by what you have in your mind as the wide MFN, even if you were not looking
at particular -- even if we cannot find the particular example you had in mind.

I will just run through a series of propositions, and if you would not mind just agreeing or disagreeing.

Do you treat the giving away of soft toys with a purchase of an insurance contract through a PCW as prohibited by the wide MFN?
A. I do not have a view on that.
Q. You do not have a view on that?
A. Yes. I recall that was the subject of conversation earlier this week, and I -- but I do not recall -- I do not have a view.
Q. So when we come on to think about promotional deals, as we will do at the moment, you do not know whether or not you should treat promotional deals involving soft toys as captured by the wide MFN or not captured by the wide MFN?
A. I am trying to remember. This came up in the conversation this week that -- in the hearing, and I had learned about it in that context, and $I$ just do not recall right now.
Q. I think that is probably a helpful answer. You say you learned about it in the context of this hearing, but it was not something that you considered previously by the sounds of things.
A. Well, no, I actually -- I actually knew that there were -- you are focusing on toys. I knew that there were some promotional discounts that did not take the form of an agreement to -- let us see, how would it work? Give me a second.

Where the PCW agreed to market rather than -- well, to market, so that might mean featuring it on its landing page on its internet site, for example; so that I knew that there were those kinds of promotional discount arrangements I think when I wrote my report, and I am not sure the precise treatment of soft toys in that context as I sit here right now.
Q. Sorry, soft toys take on a particular significance in the context of a lot of discussions about PCWs in the UK because, you may not be aware but in the UK ComparetheMarket is also sometimes euphemistically known as "ComparetheMeerkat" because it has promoted its wares using soft toy meerkats as gifts that one can obtain when you purchase through the site. Therefore, soft toys have a particular profile in this industry here, but that is why it is of particular significance. Just to be clear, when you talk in your report about promotional deals, are you referring to promotional deals involving giving away soft toys in return for acquiring home insurance on a particular PCW?
A. My understanding is that those are included in the -that promotional deals that do not take the form of a commission reduction in exchange for an expected price reduction but took other forms, are included in the data. That is my understanding.
Q. So your understanding means that the wide most-favoured-nation status clause prohibits the provision of toys by a PCW if another PCW has a wide MFN and it is not giving away soft toys, am I right?
A. No, I did not say that. I was answering a question about what I understood to be counted in the promotional deals database, and I accepted how the CMA attributed those promotional deals, in the same way that I accepted facts found by the CMA in the rest of the Decision.
Q. Just to be clear, you are saying soft toys would have a value and, therefore, those giving away of gifts would be captured by the wide MFN because you would attribute some value to the soft toy and that would be used effectively as a notional reduction in the price given on the website?
A. No, that is not what I said.
Q. Okay, I am sorry. Please.
A. In the way the promotional deals database was computed, my understanding is that it could include promotional deals that might have involved marketing by the PCW, so
that they were analysed in that database or included in that database by the CMA staff. That is not the same thing as taking a view as to whether they were within or not within the wide MFN that you have been asking.
Q. That is not the same thing. Just so I understand correctly, you are saying in your report you used the promotional deals database on the basis that it could include these sort of promotional deals involving soft toys when you were carrying out the analysis you carry out in the remainder of your report?
A. I do not know specifically which types of marketing arrangements were counted by the CMA in the promotional deals database, but $I$ know that some were; and whether soft toys in particular were, $I$ just do not recall. I am not sure I ever knew.
Q. Let us move away from soft toys to something that might have a more obvious and direct monetary value. What about meal vouchers or cinema vouchers, how did you consider that those were to be treated?
A. I do not think I know how those were treated in the promotional database specifically, except insofar as I know that the promotional deals database did include promotions that were marketing related, but I did not explore what specific types of marketing were involved in those promotions.
Q. Right. If the promotional deals database, for the sake of argument, did include deals involving toys or vouchers and in fact those were not prohibited by the wide MFN, then would that not give you a concern as to the analysis of promotional deals that you are then looking at?
A. It would not give me a concern, because I was interested in how the number of promotional deals changed from the period before the -- how the number of promotional deals introduced changed from the period before the wide MFN was removed and the period after, and as long as the promotional deals were identified in the same way before and after the wide MFN removal, it is a reasonable comparison to make. So it would not concern me the precise treatment -- the precise treatment of the kinds of deals you are asking about would not concern me so long as it was consistent.
Q. Right. If it was inconsistent, that would trouble you?
A. Well, if it was inconsistent $I$ would want to investigate in what respect it was inconsistent and think about whether that would lead me to want to adjust how I counted on deals in -- before and after wide MFN removal. But my understanding is that there was not a consistency problem in these data to worry about.
Q. Let me just understand what we are doing here. When we
come on to look at the tables and the analysis you have of promotional deals, you are not suggesting that you are looking at whether or not the wide MFNs precluded certain deals during the relevant period which were then allowed afterwards, and looking at how many of the promotional deals that were, as alleged by the CMA, prohibited before emerged afterwards, you do not care about that distinction.
A. The analysis that $I$ undertook in my report in response to what Ms Ralston had done in her report attempted to count, among other things, the number of deals before the wide MFN removal -- I guess the table is for covered providers only, but to count the number before and then the number after for various kinds of -- well, I am sorry, I think that might have been broken down in various ways, but it was a count of before versus after, and so I was looking to see whether the number changed, and, if so, how, and $I$ was not investigating the specific deals that were included in the data set.
Q. I see. Can I just test one more with you? I think I know the answer.

You are, by the sound of it, completely ambivalent as to whether or not a cashback offer is or is not prohibited on the formality of the clause by the wide MFN. Do you understand what I mean by "cashback offer"
in these circumstances?
A. I suspect I do, but I am not entirely sure. I would appreciate an explanation.
Q. I am more than happy.
A. Yes.
Q. It was an open question. So a cashback offer is where you purchase a product and then you get an indication that you will get cash to a certain value in relation to -- paid to you when you purchase the particular product. If we think of money as being vouchers that can be used universally, it is a variant on vouchers, one might say.
A. I have lost the thread of the question.
Q. I am asking whether or not you considered cashback offers to fall within the scope of the wide MFN.
A. I do not recall whether I ever -- I do not think I have ever taken a view as to whether those fall within the scope of the wide MFN.
Q. Just to be clear, your view of the promotional deals data set that the CMA used was that it encompassed all sorts of promotional deals, never mind whether they would formally prohibited by the wide MFN or not?
A. My view is that it incorporated all sorts of promotional deals and I do not know whether they would have been prohibited by the wide MFN or not.
Q. I think just to make sure that we understand correctly, the data set that we are talking about is the data set of a total of 69 promotional deals that were agreed and implemented in the period January 2016 to June 2019. I am happy to go to the Decision, but do you recall that being the case?
A. I do not recall the precise number. That does not sound like it is an unreasonable number relative to what $I$ am remembering, but $I$ do not recall the number.
Q. Sure. Look, I do not want to be unfair, let us go to the Decision at J.4, which is $\{A / 1 / 503\}$.

They say at J.4:
"In addition to the Retail Prices Dataset, the CMA used data provided by the Big Four PCWs and home insurance providers to identify promotional deals which were agreed and implemented in the period January 2016 to ... 2019.
"This combined 'Promotional Deals Dataset' was used by the CMA to assess the pricing behaviour of those providers which agreed a promotional deal with one of the Big Four PCWs. The Promotional Deals Dataset included information on:
"(a) The reduction in commission fee (or other service offered) by the target PCW for the duration of the promotional deal;
"(b) The reduction in retail price agreed by the home insurance provider for the duration of the ... deal; and
"(c) The months within which the ... deal operated ..."

That is the data set we are talking about, I think.
A. That seems correct, yes.
Q. I am going to come back to some ambiguities in relation to that data set perhaps a little later, but let us just go to the comparisons that the CMA undertook in relation to this data. Could we go to the Decision at $\{A / 1 / 327\}$, please. This is:
"Promotional deals during the Relevant Period.
"... 9.1 shows the number of promotional deals that were agreed during the Relevant period by providers subject to wide MFNs before and providers without wide MFNs."

If we go over the page, it says:
"Table 9.1: The number of promotional deals agreed by the providers subject to wide MFNs and providers without wide MFNs."

Do you see the relevant period being considered there is January 2016 to November 2017, so it is 23 months; yes? Then you see providers subject to wide MFNs there were five deals done, and providers without
wide MFNs there were 24 deals done. Do you recall that table?
A. Yes, I think I have seen this before.
Q. Then if we could just go to 9.28 \{A/1/330\}:
"... the difference in the number of promotional deals agreed during the Relevant Period by providers subject to wide MFNs and providers without wide MFNs supports the CMA's finding that CTM's network of wide MFNs restricted the ability of and reduced the incentives on the relevant providers to compete on price using differential pricing."

So they are saying restricted the ability of those HIPs subject to the wide MFNs to engage in promotional deals. That is what they are saying there. I do not think that is controversial.
A. I agree that is what they are saying, yes.
Q. I just want to be clear. If the promotional deals that we are talking about did not fall within the scope of the wide MFN, then those promotional deals -- there would be no restriction of ability for the provider to enter into those promotional deals, would there?
A. There would be no contractual restriction on the ability of the providers to enter into them. It could be that the -- if the wide MFNs changed the competitive environment, that would lead to a difference in the
incentive of the firms to engage in the promotional deals.
Q. Yes, that is the second of the disjunctive propositions. I put the first to you. It would not restrict the ability, would it?
A. It would not restrict the contractual ability, that is correct.
Q. When you say "the contractual ability", what you mean is the ability legally to enter into those deals?
A. That is correct. They have to be violating their contract to enter into those deals, presumably, under the assumption that you are making that the deals were subject to the wide MFN. So in that sense they would be restricted, they would have to violate their contract to engage in them.
Q. I am so sorry, I cut across you. Were you concluding? I apologise.
A. The ability is -- I think you just mean what $I$ have just said, when you say "restricted the ability", but I just wanted to clarify what I meant by "ability". They have the physical ability to do what they want. It's that there was a contractual limitation.
Q. Physical ability. So they can just ignore the clause is what you mean by physical ability in those circumstances.
A. That is correct, they could just do it.
Q. Yes, just do it. We are not in Nike territory now, but yes.

Can we just go to Ms Ralston's first report, \{A/5/174\}, please.

Here you will see Ms Ralston -- you have read this, I am just directing you to it for context -- here she is talking about the comparison, which $I$ have just shown you in the table, of with and without a wide MFN during the relevant period.
A. Excuse me?
Q. I am so sorry.
A. What paragraph are we on?
Q. I was just picking up the heading actually at 9C.1. I apologise.

Then you will see 9C.1:
"Comparison of providers with and without a wide MFN during the Relevant Period.
"The CMA observes that, during the Relevant Period, fewer promotional deals were agreed by providers subject to a wide MFN than by providers that were not ..."

This is redacted here, but I think the numbers are not redacted in the table I have taken you to, so I am going to treat them as open.
"The CMA attributes this difference to CTM's wide

MFNs, and considers that this supports its finding [of restricting] the ability of providers to compete on pricing using differential pricing. In my opinion, this is not the case."

You have just provided one indication.
"I consider the most relevant finding from this comparison to be that CTM's wide MFNs did not constrain HIPs from undertaking promotional deals."

I think this is the second point you were raising, that actually what you are seeing, at least with those five in that table, is the wide MFN covered HIPs, as you put it, having the physical ability to go off and do promotional deals even if they are in breach of their contract. That is correct?
A. I guess you are seeing that they undertook five promotional deals, I guess. So I guess to that extent I agree with you.
Q. Are you just saying that is not very many promotional deals?
A. No, I am not saying that at all. I am not sure $I$ was picking up on the nuance of your question and $I$ was trying to be helpful in answering in a way that obviously confused you, and I apologise.
Q. Sorry, I am not sure $I$ was as subtle as nuanced there, Professor Baker. So:
"Second [in 9.70], the CMA has not fully explored other factors that could have had a material impact in driving a difference between these two groups. In particular: (i) whether fewer HIPs with wide MFNs were asked to engage in promotional deals by [two PCWs] (for example, because they are smaller providers ... may be less economic incentive ...) and (ii) whether such HIPs were less interested in participating in promotional deals ..."

If we could go over the page:
"In terms of the first point ... PCWs did not want to engage in promotional deals with all HIPs. Although the CMA acknowledges this, reporting that 'PCWs target only a subset of providers on their panel ...' it has not controlled for this in its analysis."

Then it said:
"Given that many of the ... insurers ..."

I'm just not reading that out because we are in open session at the moment, but you can see that number.
"... did not have a wide MFN, including a number of popular household brands ... it may have been the case that insurers without wide MFNs were more likely to be asked to engage in promotional deals. This could explain much of the observed differences in the number of promotional deals pursued by the two groups."

Then:
"In terms of the second point, the CMA sought to address the issue by asking HIPs about their appetite for promotional deals ... The CMA contacted [a number of HIPs, with and without] ...
"The CMA notes ..."

I am going to have to ask you to do some maths in your head with the numbers that $I$ am not going to read out, because otherwise we will have to go into private session I think and I do not want to have to do that, unless I am told.

Can I just pause for a moment, Professor Baker. Do we actually have any concerns at all in relation to these numbers, or can I refer to them in open court?

MS DEMETRIOU: I think you can refer to them in open court.

MR BEARD: I am most grateful to Ms Demetriou for that clarification.

The CMA contacted 17 HIPs with wide MFNs and ten HIPs without wide MFNs:
"The CMA notes that four of the wide MFN providers and six of the non-wide ... stated that they were they 'were willing to discuss promotional deals with PCWs and consider them on a case-by-case basis ...'
"The CMA concluded that this demonstrated there to be a similar appetite for promotional deals by HIPs both
with and without wide MFNs."

Now, just looking at those numbers, 4 of 17 against 6 of 10 , do you consider that demonstrates there to be a similar appetite for promotional deals by HIPs with and without wide MFNs, on the basis of those numbers?
A. I don't -- so this is making a comparison across HIPs with and without MFNs. In general, I think it is difficult to determine the appetite of one group versus the other from a comparison, a cross-sectional comparison, and so I do not find these numbers as useful as the analysis that $I$ did in my report for understanding whether the HIPs with the wide MFNs had an appetite for promotion.
Q. We will come back to that, Professor Baker. I think you have answered very fairly that you do not treat these numbers as demonstrating there to be a similar appetite for promotional deals by HIPs with and without wide MFNs; is that fair?
A. I do not find them strongly probative one way or the other.
Q. So, strongly probative one way or the other; you are accepting, I think, that they do not demonstrate there to be a similar appetite. Is that correct?
A. Well, I am puzzling -- I am thinking through your word "demonstrate", because a demonstration would -- I mean,

I would want to look at all of the evidence as a whole to think about whether it shows a difference in appetite or not, and I do not -- my recollection is I did not think hard about the cross-sectional analysis here in either the report -- in either the commission -- the Decision or Ms Ralston's report with respect to the particular issue of appetite, because I thought there was a better way to analyse that question than to do the comparison across two types of wide MFNs at the same time. I prefer to look over time in order to understand how to think about that issue. So that maybe is a long-winded answer, but I think I answered your question. If I did not, please ask it again.
Q. You said then two types of wide MFNs. You are saying the cross-sectional comparison is between providers with two --
A. I made a mistake.
Q. No.
A. Two types of providers.
Q. That is fine. I just wanted to check for the transcript, Professor, that is fine.

When you say cross-sectional analysis, you mean, I think, what we might talk about as the during and after analysis, would that be ...?
A. No, I am sorry, I am using -- I apologise, I guess it is time series econometrics language. You have what is essentially a data set involving different firms and can make -- over time, and could make comparisons across firms at any one time or for given firms over time, or use all the information together.

I understand the conversation that we have been having as a conversation about what can be inferred by a comparison between the behaviour of firms, two different types of firms at any one time, so that is cross-sectional in the language $I$ was using before, and the -- and I was suggesting that in the context of my report what $I$ wanted to do to understand this appetite issue was look at how firms behaved, how their behaviour changed over time, rather than comparing across firms at a given time.
Q. Yes, sorry, when $I$ said during and after, I am talking about comparison over time. During the period when the wide MFN was in place with CTM and the period afterwards. That is over time.
A. That is correct.
Q. Yes. Sorry, I may not have been clear enough.

Before we get into -- and we are going to come to the material in your report, Professor Baker, but could we have the Decision at $\{A / 1 / 345\}$, please, picking it up
at 9.70.
"Table 9.3 ..."
Which we are just going to come to, it is over the page, but $I$ am just giving you the description:
"... shows the number of promotional deals that were agreed during the 19 months of the Relevant Period (... from January 2016 to July 2017) compared to 19 months after CTM stopped enforcing its wide MFNs ..."

So December 2017 to June 2019:
"As outlined above at paragraph 9.29, the CMA has done this for comparable periods to take into account the fact that it has four months more data for the Relevant Period than for the period since CTM stopped enforcing its wide MFNs and has also taken [what it says is] a conservative approach by using the 19 months of the Relevant Period over which the highest number of deals was agreed."

First of all, 19 months: when $I$ first saw this, I just thought it was a weird period because normally you talk in terms of 12 months, 18 months, two years, but we have 19 months. I understand that the only reason that period was used was because that was delineated as the relevant period for the infringement by the CMA. Do you know whether that is the case?
A. If you are asking me what do $I$ know --
Q. Why do you use 19 months? 19 months is just a very odd number.
A. So I do not know why the CMA began collecting data at the time it did, but it appears that, from what you read, they were trying to use the most data they could whilst still keeping to having the identical months, as you put it, during and after.
Q. Yes. So it is delineated by the fact that they made a -- they were focusing on an allegation over 19 months, so they compared them, I see that.
A. Excuse me, I thought the infringement period was longer than 19 months.

MS DEMETRIOU: It is two years. I think it is the 19 months comes afterwards.

MR BEARD: Thank you. That is the data they have, and then you see the table, January 2016 to July 2017, and then December 2017 to June 2019.

Then you see the numbers there which are not redacted, the number of deals agreed by PCWs during and after the relevant comparable period.

So for all PCWs you have got 26 in the 19 months during the relevant period, and then subsequently 38. Now, I do not think in your report this is a table you particularly focus on, because $I$ think you focus on deals agreed by insurers with the wide MFN only. That
is correct, is it not?
A. I have a table involving deals agreed to by covered providers, but $I$ discuss changes in the number of deals agreed to by other providers and probably reference this table at that point, but $I$ am not sure whether I do.
Q. Yes, we will come back to your tables, as I say. The headline is on this totality, the number of promotional deals, total number of promotional deals, I think, agreed by PCWs during and after the relevant period is -- there are 26 across 19 months in the relevant period, and then 38 across the 19 months subsequently. So we are talking about a shift in total across the whole of the PCW industry of 12. That is right, is it not?
A. The increase from 26 to 38 is 12. Another way to put it is it is, what, nearly 50\%?
Q. Yes, it is interesting, when you use very small numbers, any shifts can create very large percentages, which can feel like they are quite startling, can they not, Professor Baker? But they are not necessarily in context.
A. Well, I am not sure what the question is.
Q. Using percentage figures with very small sample groups can give a misleading impression as to the practical impact of particular arrangements, can it not?
A. Using small -- increases from a small base can make a big percentage difference, but it is not -- and which way is more or less misleading is not an inherent property of the size of the number, so I -- that is the part of your question $I$ did not fully want to accept.
Q. Understood. We will come back to contextualise the promotional deals issues in a little bit, but let us just look at this table.

What is being emphasised here by the CMA, 9.71:
"Table 9.3 shows that, the number of promotional deals has increased ... In particular, the number increased from 26 ... to 38 ... This represents a 46\% increase [your maths was very close] in the number of promotional deals and includes CTM's largest rival ... This demonstrates an increase in price competition between PCWs since CTM stopped enforcing its wide MFNs."

So they move from the number to essentially a causal story, a demonstration of that point. But you would accept, would you not, that there might be a whole range of other factors that could have led to a change in the number of promotional deals done over a particular period, would you not?
A. Yes, this is consistent with an increase in price competition, but, as you say, I agree that one could imagine other reasons besides the removal of the wide

MFNs for changes in the number that would not be -well, I will stop there.
Q. Yes, I think I understand. It is not a demonstration of price competition, I think you accept.

I am not going to ask you questions about what the alternative causes would be, in the light of that helpful answer.

Could we go to $\{A / 1 / 331\}$.
Actually, if we could just go back, because the introduction to this table will be on the preceding page $\{A / 1 / 330\}$, thank you.

This is:
"Promotional deals since CTM stopped enforcing its wide MFNs."

Then 9.29:
"Table 9.2 shows (i) the number of promotional deals that were agreed by providers subject to wide MFNs ... during and after the Relevant Period."

So it shows the number of promotional deals agreed by providers subject to wide MFNs, what you have referred to as covered providers, I think, during and after the relevant period, and the number of providers subject to wide MFNs that agreed promotional deals during and after the relevant period:
"This is shown for periods of the same length to
ensure comparability, comparing 19 months ... with 19 months ..."

Then the CMA is following a conservative approach. If we can just flip over the page $\{A / 1 / 331\}$, $I$ am taking you to this because this is the CMA's original version of what we come on to see in relation to your report about focus on covered providers. You see at the top of table 9.2 the heading, $I$ have effectively trailed that, and then you see, first row, number of promotional deals agreed by these covered providers. You have five in the 19 months from January 2016 to July 2017, and then you have nine in the months afterwards.

So that is an increase in total, a total increase of four promotional deals. There are four promotional deals more in the 19 months afterwards. I do not think you are disputing my basic arithmetic in relation to that. But it is a very small number on its face, is it not?
A. The number is four. I do not know about characterising it as small or large, but it is four.
Q. Right, okay. Four is not a small number, four is not a small number.

We will come on to discuss the potential mechanisms for an impact on competition, but Ms Demetriou yesterday talked about iterative process, an iterative approach to
competition. If we are talking about an iterative approach to an impact on competition, the theory would be, would it not, that essentially during the relevant period the wide MFNs were, formally at least, constrained from entering into promotional deals. That is correct, is it not?
A. I am sorry, that the covered providers were constrained --
Q. Yes, the covered providers.
A. -- contractually from entering into promotional deals?
Q. But in fact we see that three of them entered into five promotional deals, but we will park that for the moment.

The theory is that they were constrained, but then in the 19 months following the disapplication of the wide MFN they entered into four more promotional deals that I suppose would notionally be the trigger for further price competition. That is how iterative theory of competition works here, is it not?
A. Perhaps I am not clear on what you mean by "iterative theory", but that word makes me think of the possibility that after the removal of the wide MFNs some firms would change their behaviour and add promotions, but others might not immediately, and those others might respond to what the first firms did, and that could lead to further responses later. Then you could also get delayed
responses to the immediate -- to the removal of the wide MFN which could also lead to further responses later.

I am not -- I think that is -- that is what the word "iterative" suggests to me.
Q. I understand, and I think that is what Ms Demetriou was saying. But the point of your account there -- we are going to come back to that, but the point of your account there is that you have to have those first movers, the people who were constrained, not being constrained and doing something different; and what we are seeing here is that what they did differently was across a period of 19 months they entered into a sum total of four promotional deals more. That is correct, is it not?
A. That is correct, but $I$ guess I have been thinking as you have been asking questions about interpreting these numbers and perhaps could usefully add some comments about how I understand these numbers that would put them in context, but if that is appropriate.
Q. Look, I do not want to stop you making comments, but I am going to come to further of your tables where I think you will be able to put those things in context. I think maybe the sensible thing for me to do is to take you to Ms Ralston's report -- I am so sorry.

THE PRESIDENT: I know you are under a degree of time
pressure.

Professor, you obviously have some points. We will hear what you have to say, and then we can work out whether in fact it is better to deal with matters more specifically, but do say your piece.

MR BEARD: Certainly.
A. Thank you. First, on the question of the fact that -the suggestion that the number -- the fact that three providers during the relevant period agreed to five deals, what to make of that, what $I$ believe is that some of those were ones that were the subject of what the CMA considered to be enforcement. So that the suggestion that was made that they show that the wide MFNs are not working is not necessarily correct, that they are not operating to affect the behaviour of the covered providers.

When we talked about the iterative competition, I wanted to add that it is not just a decision of the HIP whether to promote; it is a joint decision with a PCW, and the PCW could be freed -- can observe that the -- a rival PCW can observe that CTM's wide MFNs have been removed and aren't applying, and could be inducing firms to promote, and those firms that are promoted, you know, have -- that could be at a different timing than the firms, you know -- that could change the timing
for the decision to remove, whether it is by promoters subject to wide MFNs or by non-covered providers which are not in this table.

My third contextual comment is that it seems likely to me that the numbers in the right-hand column, after the relevant period, are in some sense suppressed and understating the effect of the wide MFN removal on the number of promotions because of the time it appears to have taken some of the providers to adjust their business strategies, and possibly the PCWs as well.

So I think this is -- in that respect, it is also a conservative comparison.
Q. I see, thank you.

Let me just ask you one or two questions about those points. We are going to come back to the timing issue, but you were in court earlier today, were you not, when Ms Demetriou was cross-examining Ms Ralston?
A. That is correct, I was here.
Q. I am not fast enough on the transcript to go and find the reference immediately, but what Ms Demetriou put to Ms Ralston in the context of the situation of the leads and lags test analysis was that it was entirely possible and plausible that HIPs could react within a month to a promotional deal being put out and indeed it might be faster than that.

In those circumstances -- and I will be coming back to this, but using Ms Demetriou's approach, 19 months would seem a very, very long time to enable you to capture any such effects. You would accept that?
A. My recollection of that testimony -- and I do not have the transcript in front of me either -- Ms Ralston was saying that the ability of the providers to promote was not limited in time; that is to say that they could decide and implement promotion quickly if they chose to, and my point was -- I think I have two points there. One is that that does not mean that all of them did. Relatedly, I have seen evidence in the CMA's decision to suggest that there was a ramp-up period and that there were adjustment delays as the firms were trying to figure out what the implications were of the new competitive world, and some of them may have reacted immediately and some may have waited to see what would happen and then responded to their rivals rather than changing their behaviour immediately.

My recollection is that based on what $I$ saw in the Decision it is reasonable to think that it took at least six to eight months on the promotions for the firms to -- for at least some firms to adjust their business decisions and it could have taken longer. So I am not confident that the 19 months is going to capture the
full effect of the removal of wide MFNs, but I am not sure that it does not either. It is just a possibility. So we cannot be -- because there is not information on exactly how long it took all the firms to respond.
Q. I am not going to try and go to that now, I will go to that tomorrow, but we will come back to those sorts of timing issues.

If we may, could we go to -- sorry, I just want to deal with your other two points, two quick questions in relation to them.

I think in relation to the first you have already dealt with, you just took the CMA's evidence in relation to enforcement issues at face value, so I am not going to ask you about that assertion. But in relation to the second, where you talked about those with narrow MFNs reacting to the process, just to be clear, it is no part of your analysis that the HIPs with narrow MFNs were constrained from entering into promotional deals during the relevant period, is it?
A. The HIPs -- the non-covered -- I assume that is what you mean?
Q. Yes, I am sorry, we are using slightly different terminology for precisely the same phenomenon, Professor.
A. The non-covered HIPs were not contractually prohibited
from engaging in promotions, but when we are looking at promotional statistics involving them, one has to think about the possibility that in the competitive environment without the wide MFN -- I mean, with the wide MFNs, that competition generally was dampened among providers and among PCWs, and in that context the non-covered providers would need not promote as aggressively as they would without wide MFNs, even though they were not contractually prohibited from doing so.
Q. I see your theoretical possibility there. That is obviously something that we are going to have to come back to in relation to these issues.

I am slightly conscious of the time, because $I$ am going to go to another couple of tables and I am not going to get through them in the next two minutes or so.

I will overnight make sure that things are tailored so that we can deal with matters as necessary tomorrow and it may mean that perhaps there is a shorter lunch break.

THE PRESIDENT: Yes, we can certainly accommodate that. MR BEARD: I am grateful.

THE PRESIDENT: In that case we will rise now.
Professor, you have probably heard me say this to other witnesses. Please do not talk to anyone about
your evidence, and otherwise have a good evening. We will see you tomorrow at 10.30.
A. May I say something about that?

THE PRESIDENT: You have a doctor's appointment
I understand.
A. It is a COVID, test, yes, and I have every hope that I will make it back by 10.30 given the scheduling time, but I can imagine traffic or whatever.

THE PRESIDENT: Professor, I quite understand. Your counsel has made that clear.
A. Yes.

THE PRESIDENT: Given that you were not expecting to give evidence tomorrow anyway, we will entirely understand if the traffic holds you up, so do your best but do not worry if you are late.
A. Thank you.

THE PRESIDENT: Thank you very much.

Housekeeping
I have two points -- oh sorry Ms Demetriou?
MS DEMETRIOU: No, sorry, I thought we were all rising.
THE PRESIDENT: Sorry, I have two points that I just thought I would briefly mention.

It has become pretty clear that we are going to have a discussion about how one weighs econometric evidence in the light of other evidence, and I do not want to
anticipate submissions, but it occurred to me that I have written on this point and the parties probably ought to at least have the opportunity of reading what I have said.

We will send you what $I$ have said. I do not think it is controversial, but $I$ think it is appropriate to draw it to both your attention, so you will get by way of email what I wrote and do with it what you will. Secondly, $I$ wonder if we could bring up $\{F / 317 / 1\}$. That is just to identify what it is. It is the Section 26 notice directed to one of the HIPs. If we within that document go to page $\{F / 317 / 33\}$, this is one of the answers provided by the HIP, and you will see it is discussing promotional deals, and you will see at the end of paragraph 99 in answer to question 22 the HIP says something about why certain promotional deals did not proceed. We were looking at this just to get an understanding of the sort of documentary material that the CMA had.

At 100, we see that there are various documents annexed to the response, and we sought to look at these but some of these annexes, they may well be in the $F$ bundles, but --

MR BEARD: (Inaudible).
THE PRESIDENT: Well, that is the question. We would be
grateful if you could see whether 18, 19, 20 and 23 are in the $F$ bundles just because we would be interested in reading them, but if they are not then we will think about whether we need to see them otherwise. Sorry, that is a rather long request for some references. MS DEMETRIOU: Sir, yes, can I do that overnight because I do not know off the top of my head.

THE PRESIDENT: Of course. Not even overnight, it is a longer timeframe than that, but it would save us time to look.

MS DEMETRIOU: We can hopefully get to the bottom of it overnight, thank you.

THE PRESIDENT: That would be very helpful. Thank you all very much. 10.30 tomorrow, but, Professor, do not worry if you are late. Thank you very much. (4.32 pm)

$$
\text { (The hearing adjourned until } 10.30 \mathrm{am} \text { on }
$$

Friday, 12 November 2021)

MS HELEN RALSTON (continued) ................................ 1 Cross-examination by MS DEMETRIOU .................. 1 (continued)

Questions by THE TRIBUNAL ............................. 134

Re-examination by MR BEARD ............................ 146

PROFESSOR JONATHAN BAKER (affirmed) .................... 162

Examination-in-chief by MS DEMETRIOU 162

Cross-examination by MR BEARD ........................ 165


