

OFT AND CC JOINT REVIEW OF SUBSTANTIVE MERGER GUIDELINES

A ROUNDTABLE TO DISCUSS

NON-HORIZONTAL EFFECTS:
HOW FAR SHOULD GUIDELINES GO?

HELD AT THE
COMPETITION COMMISSION

ON

THURSDAY, 2ND OCTOBER 2008

THE PANEL:

Dr Amelia Fletcher (Chair)

Professor Mike Whinston

Professor Margaret Slade

Dr Mark Williams

Dr Jorge Padilla

IN ATTENDANCE:

Dr Peter Davis, CC

Dr Chris Walters, OFT

Dr Ioannis Kokkoris, OFT

Dr John Collings, CC

Professor Bruce Lyons, CC

Mr John Davies, CC

Dr Nicola Mazzarotto, CC

Dr Jozsef Molnar, CC

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MR FREEMAN: These roundtables are a very important part of our guidance revision procedure, which we are doing jointly with the Office of Fair Trading as a novel exercise in the UK in inter-authority guidance, one of which we are justly proud. Contrary to popular belief, not everything in competition theory is settled and from time to time it is very helpful to examine some of the underlying thinking. We like to do that in the best possible way with the best possible people, and I am absolutely delighted to welcome you all here today.

I am not going to direct affairs. I am going to hand over to John Davies and I wish you every good fortune, but I shall listen very carefully.

MR JOHN DAVIES: Thank you very much, Peter. There are just a few points of general introduction to the day from me and then I will hand over to

Amelia, who is going to chair the first session, and then this afternoon Peter Davis is going to chair the session on coordinated effects.

As you know, today is part of our programme for revising the CC's and OFT's substantive merger guidelines. Our guideline documents are very important. For background, they help us to ensure consistency across our inquiries and they also, particularly, help external parties understand how we are going to decide cases. What we are trying to do is to update the merger guidance, which has now been in existence for about five years, both in the light of trying to apply it to real cases, but also in the light of any improvements in understanding in the economic literature that have come along.

We began the process at the start of the year with the public call for comments. I think that it is probably fair to say that we received more comments from lawyers than we did from economists at that stage and part of the thinking behind the roundtables is to get some comment from economists.

We have not yet got a draft revised text. We have just about completed the internal process of discussions around and between the OFT and the CC. This is, if you like, the last stage of that. We then propose to begin drafting and we will have some internal drafts going around over the next few months. What we then intend to do is to put out a complete draft substantive guidance, a single document for the two organisations, around about the end of 2008. That will be out for consultation for some time. We expect then to publish the final version some time around the middle of 2009.

At this stage we are still completely open to ideas. We have selected these two topics of non-horizontal mergers (for this morning's session) and coordinated effects (for the afternoon session) because they seem to us to be areas where it is particularly complex, how one draws the links between the evidence that we might see and the decisions that we make on cases.

I am delighted that we have such a distinguished body of panellists this morning and this afternoon to assist us in thinking through these problems.

We are having a transcript taken, as you can see, and we will be publishing the transcript on our website. We will give speakers an opportunity to look at and comment on the transcript.

Finally, I would just say a word about where these guidelines fit into UK

merger control, particularly for the benefit of those who are not so familiar with the UK system. We have a two-stage system embodied in the two institutions, the OFT and the CC. The OFT is the phase one authority. It reviews a large number of cases, the great majority of which, of course, it clears. Then, if it finds, on the basis of quite a limited information-gathering exercise, there is a realistic prospect of a substantial lessening of competition (an SLC), it can refer it to the CC or, again in a very compressed process, it can agree undertakings with the parties that remove that realistic prospect. But it is not an in-depth exercise, either in the analysis or, indeed, in that negotiation of undertakings.

If it comes to the CC, there is a more in-depth process: 24 weeks, extendable to 32 in some cases. We have substantial information-gathering powers. That is a much heavier process. What we are there to decide is whether we expect the merger to result in a substantial lessening of competition.

The CC can be appealed to the Competition Appeals Tribunal, but, on judicial review grounds, not on the merits. By and large, the CC's decision is final. Indeed, on only the two occasions since the Enterprise Act came into effect in 2003 and the guidelines came into operation. On both occasions the CC's decision was upheld, most recently last Monday. The CC really is the decision maker.

It makes absolute sense to have joint substantive guidelines for the two organisations, because it would not make sense if the two regarded pieces of evidence in substantially different ways. However, there is clearly a difference in the test applied as phase one and phase two: the 'realistic prospect' of an SLC for the OFT and an 'expectation' of an SLC for the CC. It might, for example - and this might be particularly relevant today - be more appropriate for the OFT to draw certain inferences from pieces of evidence that would be enough for the OFT's decision, but might not then be enough for the CC's decision. In particular, I think that that applies to simple screening rules which might be appropriate at the OFT stage. Or they might not - that is the sort of thing that we are here to discuss - but they would rarely be appropriate for the CC.

Those last few paragraphs are my three-minute overview of the UK merger control regime!

Without further ado, I will hand over to Amelia to chair the first session.

CHAIR: In this session, we are here to discuss non-horizontal effects. The title

of the session is telling, since we could have focussed on non-horizontal mergers, not non-horizontal effects. But I hope that we will eventually focus on both; that is, we will also discuss potential non-horizontal effects of horizontal mergers.

Where are we in this area generally? We have had Commission guidance on non-horizontal mergers over the past year and this, I think, is a huge step forward. It highlights that non-horizontal mergers can very often be beneficial and, certainly are more likely to be good than horizontal mergers. This is both because there is no direct reduction in competition and because there are very likely to be efficiencies.

That guidance also looks at three areas of potential harm, however: non-coordinated foreclosure, non-coordinated effects, resulting from access to secret information from the merger, and co-ordinated effects. The guidance covers both vertical mergers and non-horizontal mergers, and while they look at them separately, they adopt broadly the same process of analysis for both.

Within non-coordinated foreclosure, certainly on the vertical side, the guidance looks at upstream input foreclosure and then downstream customer foreclosure. Within both of those, the guidance very much stresses the importance of looking at ability, incentive and likely effect, as well as also looking at potential efficiencies. Within coordination, it adopts the now fairly standard approach of looking at how the merger helps to achieve coordination, how it helps to monitor deviations from coordination, and how it helps in punishing cheating.

Much of this is very good. I think that one of the biggest questions for us, at the OFT and CC, which is not really a question for today, is just how much of that detail - the Commission guidance is 25 pages long - we can include in our guidance, which we are hoping to keep rather shorter. Obviously, not shorter than that overall, but there are a lot of other things to cover, so the section on vertical and non-horizontal effects will I think, be shorter than that. We want to keep it short, we want to keep it pithy, while keeping it very user friendly and helpful.

We also wish to think about whether there is anything missing from the EC guidelines, either in terms of the economic theory, or in terms of how to make them practicable. I think that that this latter point is particularly important here. We have a couple of practitioners on the panel as well as a couple of academics, so we are in a good position to cover both economic theory and the practicability of assessment, although I am sure

that both academics and consultants will talk about both aspects.

For example, one question on practicability is whether we could develop more sophisticated screens for non-horizontal mergers than the very gentle screen set out in the Commission guidance, of typically not bringing a case if the merged body has less than a 30 per cent market share in both markets. That seems to me to be a broadly sensible screen - although we could open that up to debate, but one could argue that it does not rule out that much. Could we go further?

I plan, in this session, to run through the questions that we have sent around in advance that were put together by Chris Walters (although I may not follow his ordering of the questions). Chris is from the OFT, but formerly of the CC, so he has experience of both types of analysis (although, as John said, it is very similar analysis, really).

On each question, I may ask Chris to elucidate further if I have misrepresented the question or if there is more that I feel needs to be said about the question.

I will then ask the key members of the panel to say a little bit about what they think of the question and then open up the debate.

Before we start the discussions, though, I have realised that I have failed my first duty of a chair, which is to provide potted biographies of everybody on the panel. I think that what I might therefore do is to ask each of the panel members to say a very little bit about their background, particularly in this area. You should also mention if you think there are any specific questions that were missing from the list of questions that you specifically would like to cover.

I will start with Margaret.

PROFESSOR SLADE: I am now at the University of British Columbia Emeritus, but I was at Warwick for six years and prior to that at the University of British Columbia. I have been an academic almost my entire economics life, although I did work for the FTC for a year. I have done some consulting for most of the different agencies.

CHAIR: No extra questions?

PROFESSOR SLADE: No.

DR WILLIAMS: I am Mark Williams. I am director of competition policy at NERA Economic Consulting. I have been an economic consultant for about ten years. In terms of the context of today, I have advised on quite a number of vertical cases. The ones that immediately come to mind, I guess, are

AOL/Time Warner and BSkyB/Manchester United. Those, I think, have been amongst the more prominent vertical cases that have been looked at over the years. I have a quite few things that I could say, but I think at the moment I would rather wait until the debate starts.

CHAIR: Jorge.

DR PADILLA: I am Jorge Padilla, managing director of LECG. I have been an economic consultant since 1998. Before that I was teaching at the Centre for Monetary and Financial Studies of the Bank of Spain. My job then was to write papers both on corporate finance and industrial organisation. I have significant experience with vertical mergers. I have advised on a number of vertical transactions in Brussels, including Google/Double Click, the TomTom/TeleAtlas deal and Thales/Finmeccanica/Alcatel, which are three recent cases that took place after the publication of the Commission's guidelines.

PROFESSOR WHINSTON: I am Mike Whinston. I am currently at Northwestern or, actually, most currently I am visiting Oxford for this year. I have been at Northwestern since 1997. Before that I was at Harvard for 13 years. I work in industrial organisation and micro-economic theory. I guess that I have written a few things on vertical issues. That is my background.

CHAIR: That is understated!

I will start with the questions. Currently we do not have a great deal about vertical or conglomerate mergers in our guidance at all. At the same time there is now this EC guidance. There is also an issue, which is that as soon as we do get into these stories of non-horizontal effects we very often get nervous about how much our story is speculative. One easily gets into theories of how foreclosure could happen in this, that and the other situation, but it is inherently speculative. Or at least that is sometimes what gets argued against us. I wondered if the panel have thoughts about whether there is a limit to how much economic theory can, actually, guide the authorities in assessing non-horizontal mergers. Also, what potential is there for drawing on the theory to establish some safe havens, for situations where we are sure mergers are going to be unproblematic. Maybe even, conversely, are there situations where we can be so sure that the merger will be problematic that, in a way, we do not have to go through a full analysis of theory of harm?

DR PADILLA: There are a few things there. First is how much guidance do we get from economic theory? Clearly, we get some guidance, but economic theory typically presents either possibility theorems - this is possible - or

impossibility theorems - this is not possible. Possibility theorems typically emerge from the IO literature. The impossibility theorem, the one monopoly profit coming from the Chicago School. Economic theory hardly produces identification theorems. When you have this and this and this circumstance, you can be absolutely sure that there is a problem and vice-versa. Most economic theories abstract from efficiency effects or, when they deal with efficiencies, abstract from anti-competitive effects, you always have partial pictures, whereas, when you have to analyse a merger, you obviously have to put together everything and balance pro-competitive and anti-competitive effects. Therefore, the guidance provided by economic theory, which is very useful, is limited in scope. That is the first question.

The second is safe havens. I think that, if you are going to produce guidelines, to some extent it is imperative to produce safe havens or to talk about safe havens. There is no use in having guidelines that say that we will look at this type of merger with the help of these handbooks, written papers and working papers - and trust us. That is not much in terms of guidelines. I think that it is useful to say that, if your merger falls within this area, then there is not going to be any problem. If not, be prepared to pay significant bills, so lawyer fees and economist fees.

Which safe haven? I think that the safe havens that we see in the non-horizontal merger guidelines are logical, because, from economic theory, we understand market power upstream and downstream in the case of vertical mergers is obviously irrelevant to determine the existence of potential anti-competitive effects. Perhaps the market shares are a little bit too low in light of existing theory. But I always take that, in the same way as I take the HHI thresholds in horizontal merger control, as an indication of situations in which the authority was going to pay no attention, not as indicators of situations where the authority considered that with that threshold there were automatically problems. Indeed, I think that, in my experience, the kind of vertical mergers that you see challenged are either mergers that produce a monopoly upstream - I think that that is the most difficult situation - or a duopoly upstream, and that would be, for example, the TomTom/TeleAtlas deal under total foreclosure theories. Those are the cases that you see. Even within those situations, in mergers where there is a duopoly upstream, you hardly see much unless there are significant capacity constraints or it is difficult or impeded in one way or another.

I think that, in practice, what you see is market share, so significant

market power upstream, and I am talking about foreclosure, the mirror image with the high concentration downstream.

Is it possible to fine tune the safe havens in the non-horizontal merger guidelines? Perhaps, if you want to move in that direction, you could be a little bit bolder in terms of what is the level of concentration upstream or downstream below which you would consider that the transaction creates no problems. Notice that the only argument provided by the Commission to defend the 30 per cent number is not an economic argument, it is, actually, an argument based on consistency with the vertical guidelines, which, by the way, are under revision now. There is not a very strong argument for that number.

CHAIR: Thank you very much. One interesting question that comes out of that is it suggests that one's screen might depend on one's theory of harm from the merger. It might be an "either/or" screen, actually, rather than an "and" screen. Mark, have you any views?

DR WILLIAMS: I am broadly with Jorge on this. In terms of safe havens, I think that the most important thing about a safe haven is that a safe haven is almost always safe. You are always going to have some wording there saying that "we reserve the right to look at cases even if they are within the safe haven", but that will be in exceptional circumstances. Actually, although one might make a case for a slightly more generous safe haven, at that point, when you start pushing it, you are then going to get into a world where, actually, reasonably often, as opposed to very infrequently, you have to override that. I think that the most important aspect of a safe haven is that they are almost totally safe. Therefore, I am quite happy with it being a bit ungenerous. That would be my one remark on that.

On the role of guidelines, there is a large literature out there of possibility theorems. We know that there are lots of ways in which foreclosure theoretically can occur. Of course, the test for an authority is whether it is actually likely to occur.

Now, in these cases you will always get the defendant's consultant saying that, "Oh, the theory of harm is speculative". Here I think that it is very important to separate two different meanings of "speculative". All merger control is speculative, because it is a prospective analysis of what will happen with the merger and, moreover, you have also got to speculate about what would happen in the counterfactual as well. It is a comparison of speculatives. That sense of it is speculative, in my mind, is

not well founded, because, otherwise, you would just close down merger control. There is a second type of speculative where the thing is what you might call fanciful. That is where I think you have to look at the interaction between the theory and the facts. This is where I think the CC is well placed compared to many other agencies, simply because it does have an extensive process of document review, bringing the executives in and, actually, cross-examining them for three hours, etc. I think that the theory is useful, it sets the framework, but, ultimately, determining whether something is speculative in the relevant sense is going to depend on documents, evidence of market conduct and to the extent that it has value interviews.

CHAIR: Thank you very much. Margaret, have you views on that? Also do you have a view on Jorge's point that a lot of the theory either looks at anti-competitive effects or it looks at the efficiency benefits, and there is not much theory that weighs up the two within one particular model. Therefore, if you are a merger authority, looking at both of those, you either have to look at different papers and try to weigh them up or you have to create a combined model yourself which weighs them up, but then is argued to be not published in any journal, speculative and greeted with statements of the "what on earth are you doing?" form. Margaret, do you have any views?

PROFESSOR SLADE: There is an alternative and that is that one can look at the evidence. I agree with safe havens. I think that, if anything, they are too low at 30 per cent. The other thing that I wanted to say is that I think the burden of proof should be with the Commission to establish harm rather than with the firms to establish efficiency. Why do I say that? Well, Francine Lafontaine and I have just finished writing a paper on vertical integration. We had first of all no axe to grind or no reputation to maintain. We had a few priors. We tried to gather as much empirical evidence as we could by ourselves looking at the literature and asking colleagues. I had some tables that I was going to present to you, but we do not have a projector, so I will just tell you. We looked at the consequences of vertical mergers or vertical integration, in general, not the incidence, that is who merges with whom. There are many outcome variables. It could be prices, profits or survival. Then we also looked at whether the consumer is better off. The last column is, "Are consumers better off?" – and: plus, plus, plus, plus, plus. I do not think that there were any minuses.

A lot of those were mergers in things like fast food and sectors that are

relatively unconcentrated. We also looked at foreclosures, specifically, and we found lots of studies that cover foreclosure, but, of course, that is not the end of the story - even a study of foreclosure is quite ambiguous. Let me give you an example. In Justine Hastings' paper she finds that integrated gasoline retailers get lower wholesale prices than independents. Well, you could say that this is an attempt of the oil companies to drive out the independents. You could also say that it is evidence that vertical mergers are efficient. We are told that it gets rid of double marginalisation and we expect lower wholesale prices when they are integrated. They often have two edges to the sword. A few people tried to investigate the total effect, that is, even if there is foreclosure, are there also efficiencies that we can combine? The few papers that have done that have come up with the conclusion that the efficiencies outweigh the bad effects.

My final table was what happens when the Government gets it wrong? These are mostly US studies. These decisions were not made by, say, the FTC or the DOJ, but they were made by States, which were not really in a position to do that. It has to do with gasoline divorcement, where States decided that it was bad if oil companies own their own service stations because they would foreclose rivals, and they outlawed it. In every case - and there are four or five studies - prices went up, costs went up and opening hours went down. It is clear that that was not a real remedy.

You could then say that, well, OK, this just means that the authorities are doing such a good job that the mergers we actually see are the ones that are good. However, this is mostly US data and, as far as I know, no vertical merger has been banned since 1979. It is not as if the authorities were screening very closely. That is why I think that it is not good to try to fine tune too much in this area.

CHAIR: That is very interesting. Mike.

PROFESSOR WHINSTON: Your first question had a lot in it. It pretty much was a question that covered many of the questions on the sheet that we received. I would start by saying that this is clearly an area where our level of knowledge is lower than in other areas, such as horizontal mergers or price fixing, for example. Obviously, that is an important thing to keep in mind. We will come to this, but where that comes in is when you start thinking about safe havens, presumptions and the like.

Secondly, on the empirical front, actually, I definitely agree with

Margaret about empirical evidence. In the questions that went around, there were a lot of questions about what theory implies but not much about what the evidence implies. I would be quite interested to see what Margaret and Francine have done.

My general sense is that there is not a whole lot of empirical work in this area that, if you look at it, you will be very convinced by it. In fairness, I have not seen Margaret's and Francine's paper and, given Margaret's description, I am quite interested in taking a look at it.

Given that we certainly do not know as much as we would like, what is the role of guidelines? It is a question of how those guidelines should be structured. There is certainly a role for guidelines in two respects. First of all, it is to say what the objectives are, what is it that you are trying to maximise. I think, particularly in the past, in some jurisdictions we have seen many, many different objectives and to just state the objective is a valuable thing.

Secondly, when Guidelines lay out what you think are reasonable theories it brings a certain level of required coherence to somebody's story. You are saying that the story that they give has to be coherent – "this is what a coherent theory might look like" - and must create competitive problems in the dimensions that we have just said are our objectives. I have not looked a lot at the EC guidelines. In fact, as a result of being on this panel, I have looked at them in the last couple of days. On those guidelines, there is an attempt to do both of those things. We will come back, I am sure, to the EC guidelines, so I will not say more about that.

You mentioned safe havens or presumptions. I think that one of the striking things to me, for example, when I see that 30 per cent rule is that I think to myself "oh yes, that seems like a good safe haven," but then I ask myself why. It is not like horizontal mergers, where we have a range of models and where we think "in this model I know what a Herfindahl of X implies about the mark-up in that model". In these vertical models, I do not know what 30 per cent implies about the mark-up. There are not, that I know of, rich models of vertical structures where you can say "here, based on changes in underlying market fundamentals, we see that in markets below 30 per cent it does not matter and in markets above 30 per cent it does". At a gut level, I might say that, yes, that is a reasonable safe haven. But, in truth, if you pushed me, I probably could not quite tell you really what that is based on. I think that that is just

reiterating again that the knowledge that we have is significantly limited.

The last thing that I would mention - and I am sure that we will come back to all of these issues - is the prospective nature, which was another part of the question. I think that there is a significant issue here about the fact that it is prospective and there is also law concerning the actual behaviours. You are going to think about banning a merger, prospectively, based on potential behaviours that may be subject to law later. How does that influence what we should do, prospectively? A good example of this is, if you think about horizontal mergers, why is it that we ban horizontal mergers, prospectively? It is because we think that regulating prices is extremely ineffective. We are not going to have price regulation. As a result, there is not going to be any ex-post control because that ex-post control would not work well, so we are going to do it prospectively. If you are thinking about prospective banning of vertical mergers here, maybe some behaviours are easier to control and some are harder. So foreclosure by raising input prices would be hard to control, because, again, it is price regulation. Maybe foreclosure through exclusive dealing contracts is easier to control, because you see the exclusive dealing contract. It is not something that I have thought through, but I think that it is a significant issue and, perhaps, affects which theories you should be able to advance prospectively and which ones only after the fact. I do not have anything better than that to say about it.

CHAIR: It is a very nice point that, actually, certain types of foreclosure behaviour would be more visible or easier to regulate than others. Were you thinking, therefore, that you might allow a merger, but with undertakings, or were you thinking rather that, you would allow the merger and then you would employ your monopolisation rules - or, in the EC, abuse of dominance rules to prevent foreclosure? Were you thinking either one of those?

PROFESSOR WHINSTON: Yes. Honestly, I was in my mind thinking about both possibilities and I was not really quite sure, in the end, which way I thought. I will use an extreme example of what you might imagine doing, and I am not advocating this. You might say that, well, somebody could object to a merger on these grounds and I would ban it prospectively if I was convinced that there was likely to be a problem, where those grounds are things that would be hard to monitor ex-post. Other theories of harm might involve actions that would be very observable and, therefore, a case could be brought after the fact. Maybe you would want

to treat those two things differently, prospectively.

DR PADILLA: Interestingly, this is exactly the approach taken by the non-horizontal merger guidelines in Brussels, and not only in the guidelines, but also in practice. One element that has to be taken into consideration when assessing a vertical merger is the possibility that the alleged foreclosure problems could be dealt with ex-post with the help of Article 82. This is not simple because not only one must consider whether Article 82 is an instrument that could be applied under the circumstances of the market in question, but also how easy that would be; whether there is an issue of observability and whether you are going to be able to be effective in deterring that kind of behaviour using Article 82. Indeed, if we think, for example of Thales/Finmeccanica/Alcatel, a number of allegations that were brought by complainants against that merger were discarded because they involved behaviour that could be monitored and controlled ex-post using Article 82.

That has an interesting implication, which is the issue of compatibility between the doctrine and the practice about the treatment of foreclosure and efficiencies in vertical mergers, and the doctrine and practice on the same issues in the context of Article 82. It is interesting to contrast the positions taken by the Commission in their non-horizontal merger guidelines, where efficiencies of vertical relationships are significantly emphasised and there is always a degree of scepticism about foreclosure theories, and what the Commission says and writes in the various papers that have been circulating over time in connection with foreclosure theories in the context of Article 82, which are much more sceptical about efficiencies and much less sceptical about the possibility of foreclosure.

DR WILLIAMS: Could I just raise one other puzzle here? I think that we are agreed that, in ex-ante merger control, one of the questions is: do we need to worry about this, because, if there is a problem, can't we just deal with it ex-post? But then that means that, in order to decide what we want to do in ex-ante merger control, we have to think about what is possible ex-post. At that point you then ask the question that, OK, in the case of foreclosure, how easy it is to determine that foreclosure has happened? The answer is that it is incredibly difficult. One of the reasons that it is incredibly difficult is that you feel that with a merger control you have the problem that it is prospective, so you are speculating, but, even in the ex-post case, really, to determine whether any form of conduct is abusive, you are really comparing it with some

other alternative conduct, so you still cannot quite get away from the speculation ex-post, even though it is tempting to say that, once you have seen it happen, you have the evidence in front of you, but there is still always going to be a counterfactual to the evaluation of that. It is not clear to me that it is that much easier after the fact, other than that you know that the price squeezes or whatever have actually happened. In a sense, you have got rid of one form of speculation, but it is a mistake to think that it is easy to do it after the fact as well.

CHAIR: That is probably true if we are going to go to a more effects-based analysis of Article 82, which is looking to be the direction of travel.

I am going to open it up for discussion.

PROFESSOR KUHN: I am Kai-Uwe from the University of Michigan. The point that Mark made, I think, is not an argument for ex-ante control. If you say that, well, ex-post, it is very difficult to find out whether it is good or bad, well, ex-ante it is even more difficult to find out whether it is good or bad and then it is very questionable whether it should have been ex-ante control. I think that the difference between ex-ante and ex-post control does not have so much to do with observability or something like that, but, in a lot of the issues that have to do with behavioural things, like exclusivity, with bundling, the advantage that you have with ex-post is that you actually have a complaint. You have a complainant who actually generates data about the market process that you can use in order to enlighten yourself about what has actually happened in the market. That data you do not have ex-ante. That data you typically can generate in the same way, for example, in a horizontal merger. It is very difficult to find out: did they price too high in any way, and there is no one who should be complaining about it, if it is an anti-competitive merger.

I think that that is the big difference. If I am looking, for example, at conglomerate mergers, it is very hard for me to think about anything that a conglomerate merger could do, ex post, that would not involve behaviour about which some competitor would be complaining.

Personally, I would be very, very restrictive about what I would be allowing for review for conglomerate mergers. I would even consider not reviewing them at all, because you at least have that ex-post instrument of control. When you have conglomerate mergers, it is not just that you are making a prospective analysis of what their likely behaviour is going to be, but you also have prospective analysis whether a certain behaviour is likely to occur. I do not really think we know very much about when

firms start using such strategies or not. Our fear is that they usually want to to some extent, so it is basically never excluded. Is that a good prediction for what actually happens in markets? How much does our theory allow us to predict whether someone is going to change to exclusive behaviour? I do not think that you can predict that very well. We actually are making prospective analysis in two steps. One is whether that behaviour is going to occur and, secondly, whether that behaviour is going to be anti-competitive. I think that that is even more speculative than you might get in vertical mergers, so I think that that is a completely different level of analysis. I think that one reasonably has to think about whether one wants to deal with those conglomerate mergers ex-ante at all, given that we have the ex-post instrument.

CHAIR: I was going to throw something into the mix there, which is simply about the resources of competition authorities and the degree of compliance in the economy. It makes things easy to assume that after a merger we will have this perfect Article 82 / Section 2 Sherman Act – compliant world where all parties abide by the rules and anyone that does not abide by them ends up in front of competition authorities; and we competition authorities, in turn, make the right decisions. Obviously though, the real world is a very long way away from that. How much should we take that into account when doing prospective merger control? Mike.

PROFESSOR WHINSTON: I think that that is another way of saying that behaviour is not observed or is not enforced. I agree completely with the added level of speculation. I brought this up and now let me just give the other side of this, which is - imagine, for example, in the conglomerate case, we are talking about some technological interconnection and there are 100 different ways that technologically you can disadvantage rivals through technical standards. That may be extremely hard to observe. You may stop one thing and the firm then does something else that disadvantages his rival. That would be an example that I would think of as being very hard to control ex-post. In some sense you can change incentives to do it, but you cannot really directly observe it and stop it ex-post. To me that would be an example where, maybe, an ex-ante approach is justified and makes sense.

PROFESSOR SLADE: There is the additional fact that most things that you can do through vertical integration you can do through contracting. If you prohibit the merger, they have another way of accomplishing the same outcome.

PROFESSOR KUHN: But by the same token does that not imply that efficiencies that are brought about by the merger, maybe, also could be accomplished by contracting?

PROFESSOR SLADE: Yes, but I do not see why the Government should be deciding which way. If there are efficiencies that outweigh the bad effects, why should the Government choose in which way they will be accomplished?

PROFESSOR WHINSTON: I do not think that that really addresses whether you feel favourably about either one of them or unfavourably about either one of them.

CHAIR: That was an interesting point about consistency. You highlighted that there is a need for consistency with Article 81 (or more generally, legislation or anti-competitive agreements) as well here.

DR PADILLA: There is one practical comment about the practice of the Commission. I think that in assessing whether they should intervene ex-ante or ignore the allegation because there are instruments ex-post, observability and the likelihood of getting information from complainants are important. I think that the other thing that the Commission tends to think - and I am not entirely sure that I agree with it, but I think that superficially it make sense - is whether they are going to have sufficient instruments to deal with the problem ex-post. It is not just about whether a certain behaviour is an abuse but whether the type of remedy that they are going to be able to impose ex-post is going to be sufficient. I think that the belief is that, if you think that you are going to need a structural remedy to address a particular problem then there is a tendency to intervene ex-ante, because we do not have the possibility - or we do have the possibility but it is difficult to apply - of intervening with structural remedies ex-post. That is another consideration that is part of the debate about whether to intervene ex-ante or ex-post.

PROFESSOR JULLIEN: I just want to add one point, which is about whether you want to do it ex-ante or ex-post. You assume that, if you do it ex-post, this will be enough, but in many cases ex post is too late. You may have a plaintiff, but, if it is a dead plaintiff, it is not very useful. If you can, it is always better to prevent. I am not calling for ex-ante blocking a merger, but at least thinking about this issue and finding ex-ante remedies could be useful. If you think about network industries, for example, if the firm uses a vertical practice to monopolise a network, then it would be too late. Once it is monopolised, it is monopolised. You can fine the firm but

you will not introduce artificially a competitor. So, if we think that ex-ante is a good time to think about it, we should do it. Particularly in terms of exclusion, as it is very important to think about it before exclusion rather than after.

PROFESSOR KUHN: Following up on Jorge's point and also what Mike has said before. In the case that you are describing of interoperability, that is the type of cases where I am finding it really hard to see structural remedies really working. One of the things that I always have in the back of my mind is GE/Honeywell. That is my template from which I am thinking about these problems, because I have thought about that case more. In that case, for example, the parties offered behavioural remedies on the bundling. They were, basically, saying that we are willing to commit not to ever bundle. If we have the instrument of ex-post review, it seems that those types of behavioural remedies are, actually, fairly good remedies because you have a means of enforcing those ex-post, so you can achieve that preventative issue that you might not achieve, for example, with an interoperability remedy, where you have, basically, said that we are going to commit to allow anybody to interoperate with us. We are going to give this as a commitment, as a condition, for this type of conglomerate merger, with an understanding of some mechanism that that can be enforced ex-post. Maybe, that is the compromise direction in which one could go when looking at conglomerates.

CHAIR: Interesting. I think that I should probably move us on to question two, since we have been going for an hour. Obviously, we are already getting into some of the other questions as well.

In addition to what we have already covered, I am going to ask the panel for an initial view on the treatment of vertical and conglomerate mergers in the non-horizontal merger guidelines, if there is anything else that you would like to add. I think that there is an interesting follow-on question from Bruno's point. That is, whether there should be anything special said about the tipping or network type of markets. I do not think that there is anything specific in the EC guidance about that. Should there be any separate treatment of those? And do you have any more general comments?

PROFESSOR SLADE: Unfortunately, I was hoping that there would be something I could click and get the European Commission's guidelines. I was going

to read them on the plane but I had a hard time actually finding them, so I have not read them.

CHAIR: That is acceptable. They are quite hidden, actually. I printed them off this morning.

DR WILLIAMS: I cannot remember everything that is and is not in them. What was the question again?

CHAIR: Do you have any views on them?

DR WILLIAMS: They are broadly sensible. Are there particular things that I think we should be thinking about more generically here? One thing, which we have been talking more about of late is diagonal mergers. Basically, the traditional view is "four legs good, two legs better". The horizontal mergers are possibly anti-competitive, vertical mergers are normally OK, whereas, of course, people are now having a greater understanding of diagonal mergers. For clarity, a diagonal merger is where the upstream firm buys a downstream firm that is a competitor of somebody the upstream firm supplies, but where the upstream firm does not, itself, supply the diagonal firm that it has just acquired. Essentially, the theory of harm here is that the upstream firm will raise the input price to its downstream customer, which will force that downstream firm to raise its price at which point business will shift to the diagonally-acquired firm, which is now owned by the upstream firm.

The neat thing about this analytically, of course, is that there is no efficiency, there is no double marginalisation benefit, because you do not actually supply the downstream firm that you have acquired. This is stuff that features in cases. It is never normally called diagonal mergers, but the issues are there. I think that this is one feature that people need to think about a little bit more.

CHAIR: As opposed to the non-horizontal effects of horizontal mergers that we are going to look at later on, this is more like a horizontal effect of a non-horizontal merger.

DR WILLIAMS: Diagonal mergers are basically horizontal.

DR PADILLA: My views about the guidelines; There are positive aspects and negative aspects about them. In terms of the positive aspects, the best thing about the guidelines is that they have introduced discipline. They have disciplined the kind of theories that the Commission considers when analysing vertical mergers. The impact of the guidelines on conglomerate mergers have been relatively small because there have not been many

conglomerate mergers analysed post GE/Honeywell. They have mainly had an impact on vertical mergers. That is where the guidance has been tested.

They also have made a positive contribution to the European antitrust doctrine through their emphasis on efficiencies. Clearly, efficiencies are taken much more seriously now than they were in the past. The emphasis on the efficiency implications of vertical mergers has had a positive spillover on the analysis of horizontal mergers, where there is an increased emphasis on efficiencies.

Another positive aspect is the debate that they discuss when to intervene ex-ante and when ex-post, and this is now an explicit part of the process. Again, in that respect they are positive.

If I may say, they have also been positive for economists. They are good for business, because they postulate many different theories that need testing. So, they have increased the business of economists significantly.

What are the cons? I think that they are a little bit of an easy matrix in the way in which they treat different topics. You can see input foreclosure developed quite thoroughly; customer foreclosure much less. Unilateral effects are treated carefully, but the coordinated effects are almost brushed aside, and conglomerate effects look like an afterthought. They are added there because the title was non-horizontal mergers and, therefore, they had to do something else apart from verticals, but they are treated very, very lightly and with much less clarity.

Despite the fact that, to some extent, it looks like a survey on non-horizontal theories printed in a small font and, therefore, difficult to read in one go, they are incomplete at some points and there are some elements of the theory that they ignore. They seem to give prominence to certain strands of the literature over others for reasons about which I am not entirely clear about.

Interestingly, and this is again on the negative side, I think that they have led to too many useless phase ones. In other words, in phase one somebody comes there with a theory that fits one of the theories in the vade mecum provided by the guidelines. There is no time to really properly test it, so here we go to phase two. What you see with lots of vertical mergers in Europe going to phase two despite initial statements in the guidelines about their presumed efficiencies. They actually go to phase two with greater probability than horizontal mergers with significant market share. They go to phase two but then there is no

statement of objections. They are stopped before the statement of objections. There is an issue there about whether this is an efficient allocation of resources. Again, why so many wasted phase ones? Because complainants go with the guidelines to the Commission and say "I have this theory and, by the way, this theory also applies and this theory also applies, and they are all here in the vade mecum and hence they all have credibility and you need to test them". But there is no time in phase one to test all those things. So too many wasted phase ones.

CHAIR: One of the things that we will probably come on to later is whether there are any simple ways to test some of these theories at phase one in the same way as we now have on the horizontal side lots of ways of testing whether there might be unilateral effects in, for example, small local markets through looking at diversion ratios and looking at margins. Is there anything similar we could do very simply at phase one to prevent so many of these mergers going to phase two, if we think that that is inappropriate? If there are lots of such mergers going to phase two and they are all being cleared, then presumably that is inappropriate.

PROFESSOR WHINSTON: I guess that I said this a little before. I have not gone through the guidelines in extraordinary detail. I read through them really once. My generalised reaction was that I thought that they were pretty good. There were one or two points where they started to get specific about how the level of product differentiation, for example, should affect your presumptions, where I was not quite sure I agreed. I would have to go through them in more detail to identify all of those things, but, on the whole, I thought that it was pretty good. They talk about what the main elements of the theory are and it is not too specific about exactly what the test would be - really (I thought) appropriately so given the level of knowledge that we have now. Actually, I did have one reaction, which is consistent with what Jorge was saying. I think that in Europe, in a lot of the elements it seemed like it was reining in things by stating what the objective was and by stating what a coherent theory might look like. In the United States, where we do not have anything even resembling this, I thought that the reaction by many commentators (not necessarily my own) would be discomfort, because it would, in some sense, validate a private bar that was going to start suddenly bringing lots of cases that, just like your phase one thing, would then point to the guidelines and say: "oh well, this has been legitimated by the DOJ". I have not been intimately involved in this, but if you are wondering for the U.S., "Why don't we have some guidelines like this?" I think there is a large

constituency of anti-trust commentators in the US that worry about lots of private actions in these kinds of cases and encouraging them.

CHAIR: That is interesting. The EU/US difference was highlighted by Margaret in her work and also in the GE/Honeywell case. It led to quite a lot of political aggravation between the US and the EU, where the US, essentially, cleared it and then the EU blocked it.

I am going to open the floor to any views on the non-horizontal guidelines.

PROFESSOR LYONS: I think that one of the things that the EU guidelines are almost good at, although they do not quite get it right, is this distinction between ability, incentive and effect. In economic theory terms, the ability - say, we are talking about a foreclosure theory - is can you reduce the profits of a rival, and the incentive is, does that increase your own profits, and then the effect is, what does that effect have on consumer prices. There are each of those three stages. Part of that comes back to the point that Kai-Uwe was making earlier, that these vertical or conglomerate effects are more complicated. They involve a change in strategy, if you are suddenly moving towards harming a rival as distinct from, say, unilateral effects of a horizontal merger.

I think that it is very good to split those three stages up. That leads you into the empirical work that you might want to do to try to understand each of those things. That is one thing that I think that they do very well, although I think they sometimes get muddled themselves in what they actually mean.

CHAIR: Do others have views on the benefits or otherwise of the incentive, ability and likely effect distinction, which I personally find incredibly useful as well? I know that it has been important, for example, in the analysis of TomTom/TeleAtlas; and looking at each of those elements and thinking where the theory falls down. Also on the diagonal merger point that Mark raised earlier, should we be aiming to do more thinking in that area?

DR WILLIAMS: Can I make one observation on empirical application? There is a technique out there which sometimes goes under the name of vertical arithmetic, which basically says that when you have a foreclosure case you add up two effects. The upstream firm cuts off supply of the input, but, by definition, if it was profit-maximising before, it will lose money when it does that. So there is a loss in not supplying what you could have supplied to a downstream firm, but then, hopefully, under the theory, you will then divert business to your own downstream firm who

will get a profit uplift downstream, so there is a loss upstream, there is a gain downstream and you trade them off and see which way the effect goes.

This basic methodology is undoubtedly sensible, but you do need to be careful on the specific application of it. There are occasionally cases where you see people looking at the extreme foreclosure situation by saying that suppose we cut off supply entirely, would that be profitable? Then they are saying that, no, it is not profitable, so we have no incentive to foreclose. In fact, if you think about what would be the profit maximising foreclosing strategy, normally, a bit like a monopolist, it does not raise supply to take all the demand, the profit-maximising strategy is probably going to be some form of interior solution where you raise the price a bit and you lose a bit upstream, but you get a bit of diversion downstream. In particular, you need to ask not "is complete foreclosure profitable?" but "what is the profit-maximising foreclosure strategy?" and then ask is that significant. That exercise is not always undertaken. But that, I think, is the exercise that should be undertaken.

PROFESSOR SLADE: I am not experienced with this, but there is something lacking there. In horizontal mergers you move from one equilibrium to another, you are saying that we look at a very partial equilibrium, holding everything else constant. The problem with vertical and conglomerate mergers is that they are much more complex and you have to know what game is being played upstream, what game is being played downstream, what happens in the channels, the bargaining between... And if you get one of those wrong - as in horizontal mergers - if you get the one game wrong, you are very far off, but here we have a lot more assumptions to make than in horizontal mergers.

CHAIR: Are there any other thoughts?

PROFESSOR WHINSTON: It is just picking up on two things that were said before, before I forget them. I think of a diagonal merger as just a special case of downstream firms that are differentiated in the products that they sell. They may use different inputs, so they are differentiated in their input uses, at least as described in the appendix of the notes that I got. My first reaction was that, well, this is just an example of input foreclosure with particular assumptions about the nature of downstream differentiation and the nature of what the input uses are. It seemed as if language about input foreclosure could apply to diagonal mergers and the specifics of what you thought the effects would be would be different.

As you looked at efficiencies from double marginalisation elimination, you would say that, OK, here I do not have them, but the basic questions and framework would be the same.

DR WILLIAMS: That is undoubtedly right. It is a special limiting case.

CHAIR: This may be wrong, but the distinction I would see is this. With foreclosure, you may even get benefits (such as lower prices) in the short term, and certainly the main consumer harm only occurs if competitors lose their role as a competitive constraint, perhaps by leaving the market. With diagonal effects, by contrast, there is just a kind of relaxing of competition on price. All parties may well stay in the market forever, but their competitive constraint is reduced. Or is this really the same?

PROFESSOR WHINSTON: You have the same thing with firms downstream that sell differentiated products. They can still be in the market but weakened and have a higher price.

The other thing that I was just going to come back to is Bruno's point. This is from the first question. It is about the timing issue and whether it is too late. I think that that is a very valid concern. Potentially, as one is describing reasons why you might intervene, for some industries you might worry about that more than others and that could be a factor that is considered, for example, in whether you do an ex-ante intervention. The risks are different when it is a fast-moving industry and there are network effects and, if a year goes by, when an ex-post case is happening, it is just too late.

PROFESSOR SLADE: Certainly my remarks are about foreclosure and not exit. They are disadvantaging rivals. In most of the empirical studies you do not see the exit. For example, in the case of cable TV channels, the suppliers favour their own programmes. They do not drive the rivals out of the market. That is termed foreclosure in the studies.

DR WILLIAMS: I think that this is an incredibly important point, because, linguistically, there are many lawyers in cases who treat foreclosure as absolute exclusion. As economists we know that, actually, that is not the complete picture and that the intermediate situations are actually much more probable. I think that it is really important to emphasise that foreclosure means not just full foreclosure, but partial foreclosure, toughening in terms of trade, etc.

CHAIR: Maybe I should not raise that here, but do we think that this is also true in Chapter 2 (or section 2 Sherman Act) investigations? That is, should we be bringing cases where there is just a relaxation of competition that

is where behaviour simply reduces the effectiveness of competitive constraints? Or might we instead wish to restrict intervention to more extreme cases, because there can be strong efficiency benefits of just the same sorts of behaviour that can also be found to be anti-competitive in terms of monopolisation? Examples here might be low pricing, bundling or even choosing who you deal with.

DR PADILLA: The law of the land post-Microsoft is that any restriction of effective competition is a problem, so you do not need to have exclusion. You do not have to have elimination of all competitors. You just need to have elimination or restriction of effective competition, if I am using the language correctly. This is the law of the land, which is broadly consistent with economics.

MR FREEMAN: Could I make my one intervention? In market investigations, which you can mention here, which is the other aspect of the law of this land, anyway, that would be very much the position. You do not deal in absolutes, you deal in effects.

PROFESSOR JULLIEN: We tend to treat full foreclosure and partial foreclosure as part of the same story. Very often we use the full foreclosure story to describe partial foreclosure. I do not believe that it is the same thing. The analysis of partial foreclosure is where you raise the costs of some firm, but it is still around and it still puts you under some competitive pressure, so you have a competitive margin to some extent. It is slightly different from the situation where you eliminate completely your competitor. I think that the distinction should be clearly drawn in the treatment of a case, whether we are talking about one risk or the other, because the incentive will not be the same and maybe the type of mechanism that you would use to achieve one or the other goal would be different. It is a bit like the distinction between accommodation versus barrier to entry. I do not know what is the view of Mike on that.

PROFESSOR WHINSTON: I think that, ultimately, you are interested in changing the behaviour of your rival in a desirable direction. Exit is a very desirable direction. Raising their price is a desirable direction. The particular ways that you might get both of those to happen are different. To get someone to exit, you need to get their profits to be negative or their continuation profits to be negative. To get them to raise their price, you are worried more about their marginal cost. Sometimes there are strategies that you can impose - maybe this is what you had in mind - that would be very ineffective if they are still around. For example, in my

paper, you know, when you bundle, the guy gets more aggressive unless you get him out. It really does matter for the effectiveness of that strategy whether you are getting him out or not - although 'out', I guess, still has many interpretations. For example, he might still be around but not making certain kinds of investments, so that would be a softening of his competitive effect. That is what I think.

DR PADILLA: I would just like to come back to a point that Bruce made before, which I think is very important, which is the ability, incentive and effect point. I mentioned that one of the pros of the guidelines has been to introduce discipline. The analysis is structured and the different theories of harm are analysed using the three-step process: incentives, ability and effects. Whether this process is entirely correct or not, one must recognise that has proved very useful in disciplining the process of analysis. You can see that, broadly speaking, phase one is focused on ability and, therefore, on market power issues, upstream and downstream. Complainants are then going to bring forward theories of incentives and likely effects, which likely will take the case to the second phase if ability has been established - i.e. if there is enough market power upstream and downstream. The second phase, pre-SO (statement of objections), is about incentives and effects. In terms of the analysis of incentives, various partial simulation models have been used and abused. They are easier to use in some circumstances, in particular when you have a monopoly upstream. They are much more complicated when you have an oligopolistic game upstream and another oligopolistic game downstream. We have wasted parts of our lives trying to develop simulation models. In the context of TomTom/TeleAtlas, all parties involved developed many different simulation models but in my opinion nothing was very robust. The analysis of effects also involves lots of hand waving. It can make a difference, however. In Thales/Finmeccanica, for example, the deal was approved for a number of reasons, but a very important reason was that effects were particularly small. The harm that a vertical merger could generate was considered relatively small and circumscribed to small niches of the market. The analysis of effects involves lots of hand waving, because one must bring together the potential anti-competitive effects and the efficiencies derived from the merger and then all that must be placed in the cocktail shaker. After the mix is shaken, the result is positive or negative but it is never clear why.

Coming back to partial and total foreclosure, interestingly, when you talk

about partial and total foreclosure to the Commission in the context of vertical mergers, what they have in mind is not exit versus marginalisation. What they have in mind when you talk about partial foreclosure are partial foreclosure models (raising rival costs models) and, when you talk about total foreclosure, it is the Ordoover/Salop/Saloner model what they have got in mind.

CHAIR: One thing that I would like to ask on that - and this is relevant to GE/Honeywell as well - is whether there should be an efficiency offence. This has been raised in the context of verticals already, but in GE/Honeywell the conglomerate story was, essentially, that the two merging parties would, without any desire to strategically foreclose anyone, reduce their prices due to the Cournot effect, which essentially is the same as a double marginalisation effect. One could view this as an efficiency benefit of the merger, in that the parties would price more efficiently. But it could nevertheless have the effect that the non-merged competitors would no longer be able to compete and would be driven out of the market, which would be likely to result in consumer harm. This seems to be a very difficult situation, which comes up in a lot of mergers. In a way, the theory of harm is that the merger creates a more efficient entity. Should we ever find against such mergers, or how should we feel about them generally? My feeling is that the non-horizontal guidelines brush over that question. They knew it was a question but they did not want to address it.

DR WILLIAMS: Can I just mention the recent radio merger? I was not involved in it and you may know the case better than me. There is at least one reading of the OFT decision in the recent radio merger - and I forget the precise name of it - in which it was actually almost part of the defence of the merger that they would post-merger be pricing bundles, etc which would offer consumers different deals. On my quick reading of it, I thought that that looks a little bit like GE/Honeywell, but here it has got them off the hook as opposed to having got them on the hook. I think that that is right, but it is a neat change.

CHAIR: One interesting question, I guess, is whether you think that it would foreclose the market in the end and raise costs. You are absolutely right. That is my reading of Global/GCap too.

DR WALTERS: I think that that is a fair reading of Global/GCap. It was a

consideration for the OFT and the Cournot effects trumped everything, as you said.

DR WILLIAMS: So you cleared it because of the price effects?

DR WALTERS: We considered that they were rivalry-enhancing efficiencies.

DR WILLIAMS: Even though in other cases, like GE/HONEYWELL, with exactly the same argument, that was why the company was in the dock.

DR WALTERS: In other jurisdictions, yes.

DR PADILLA: I would say that in Europe GE/Honeywell is history. I am going to illustrate that with the practical example of Google/Double Click. In Google/Double Click, there were many complainants going to Brussels with efficiency offence theories. I was not working for the merging parties. I was working for one of the complainants, which incidentally did not raise an efficiency offence theory. The Commission made it very clear to all of those complainants that raised efficiency offence theories that, actually, they saw those efficiencies as one of the positive aspects of the deal, not as one of the negative aspects of the deal. They welcomed their comments because they were re-confirming their position that the deal was pro-competitive. PROFESSOR KUHN: I do not think that GE/Honeywell was an efficiency offence theory. I think that the theory that you are talking about is about complementary and that actually was not raised. The bundling theory was not on a complementary issue that much. It was dropped for - what is it? - Archimedean theory of leveraging, which was all on the financial power. I think that even in GE/Honeywell they were very careful not to say that they were running an efficiency offence and I think that that is pretty much dead. They were trying to make a foreclosure argument and, however you think of that, the reason why they were overturned is because the way that they put evidence together was so atrocious that it just did not even fit the ...

DR PADILLA: If I might add there, I think that there was an interesting dance in GE/Honeywell. I mean, it is history, but it is interesting. My understanding is that initially, Cournot effects were put forward as efficiencies. The Commission reacted to that with "this is going to be problematic." Then, somewhat surprisingly the parties responded by saying: "sorry, we were wrong, the merger will not produce any efficiencies of this sort." Then the case was fought along different lines, with the G-CAS story and the bundling story. It was an interesting dance of "there is going to be an efficiency offence" - "oh, who talked about

efficiencies? Now, let us talk about something else”.

PROFESSOR WHINSTON: Efficiency offence to me seems a fairly dangerous route to go down. If you want to do the efficiency offence, you can do it for horizontal mergers, too. It is not hard to put together some model where a firm gets a little more efficient and that actually causes someone else to exit and raises the market price. But I think that the bottom line is that it is an administrative process that is costly and you have to ask yourself how often are you going to end up getting swayed by such arguments? Therefore, do you want to listen to them? It is similar to how we treat price fixing: You can write down models where price fixing is good. You can do that, but that does not mean the law should entertain those arguments. If you did that, everybody would come in and say that my price fixing is good and you would be adjudicating those cases. It is the same thing with the efficiency offence. It seems to me not a wise move.

PROFESSOR SLADE: I agree, it sounds like banning a horizontal merger because there are economies of scale and the big firm will become too cost effective.

CHAIR: I think that that is probably the clearest agreement we have had from people so far. Views on this seem very consistent.

PROFESSOR JULLIEN: On that we had a discussion once with lawyers and they told us that, if the efficiency offence came into the process, then they would stop even to propose defence. The defence may be turned around, so, if the defence is not accepted, it would become an offence, so the whole process becomes completely flawed.

DR WILLIAMS: One twist on that is to do with market shares. The lawyers can still get hung up on the market shares and I have come across quite a number of cases where the firm is saying that this merger is going to be efficiency-enhancing and it is going to lower costs. Then someone says that, well, so, basically, your market share is going to go up as a result of the merger? “Oh no! Oh no!” Basically, there is still the schizophrenia here in terms of this merger is going to be efficient but it is not going to increase our market share.

CHAIR: Likewise with barriers to entry as well. I am going to break for coffee now. We have got through two questions, but I think that we have in effect covered a lot more questions than that. I am going to have a quick look and see which questions we have covered and which we have not.

(Short Adjournment)

CHAIR: Welcome back. We will continue where we left off. I am going to ask John Davies to raise the next question, which is, essentially, about what we should care about when addressing these mergers. It has already come up a little bit in the debate, but he will help us put our finger on exactly the question.

MR JOHN DAVIES: This is around paragraph 4 in this document, but it is a more general point that keeps coming up as I hear this discussion. It is the same point that occurs to me whenever I read anything in the literature. It is that the economical analysis of vertical mergers is always based around what is the total welfare effect. For example, when we were discussing the radio merger just then, there were comments along the lines of, well, there are efficiencies so that is why it was cleared. When Chris responded to that, he was very careful to say that they were rivalry-enhancing efficiencies and that is why it was cleared. What we, as a competition authority, do not do is just look at the merger and say, "Is it welfare enhancing or welfare reducing?" We do not do that. We are constrained from doing that by the law. We actually have a two-stage process. We consider the possibility of an SLC (substantial lessening of competition) which is primarily about a reduction in rivalry. It probably contains a notion of detriment, but it is primarily about a reduction in rivalry, an SLC in and of itself. And we make a decision on that, a provisional decision, and only then do we go into the question of what to do about it, the remedies. That is when we assess the detriment, because the remedies have to be proportional to the detriment. Crucially, for this topic, that is also when we consider any customer benefits, which is our term for efficiencies that pass between the customers that might offset that.

I suppose rivalry-enhancing efficiencies are fine. That is when we consider that something has happened as a result of the merger that actually makes the market more competitive. So, overall, there is no SLC: competition has not gone down. But the position that we might often find ourselves in, if we are looking at vertical mergers, especially, is that, if competition is in some way damaged, there are compensating benefits, which is a different thing. Yes, there is less competition, but prices are lower so consumers are OK. In those circumstances, firstly, there is a procedural problem. We would need to find an SLC and then we would consider whether or not to have a remedy at all on the basis of those benefits, which is possible, but doing too much of that would be a bit

weird. Secondly, I suppose, the question is does that system make any kind of sense? Can we define an SLC in and of itself, in the case of a vertical merger, and isolate that effect of competition before we even start to consider the efficiencies?

PROFESSOR WHINSTON: How is it different in a horizontal case?

MR JOHN DAVIES: It is exactly the same, but in a horizontal case, the question of efficiencies (customer benefits) is much rarer and much less critical. It is quite rare that cases have gone all the way through to an SLC finding - and this is true of horizontal or non-horizontal - and then, because of the customer benefits associated with the merger, there have been no remedies, which is the equivalent of clearing it on efficiency grounds within the UK system.

It is rare because of the conditions that are attached, for example, to when we can accept those customer benefits: the usual sorts of things. I think that it is probably fine in a horizontal merger regime to have, if you like, the efficiency defence as quite a rare thing that comes along, but I would have thought that the problem, in assessing non-horizontal mergers, is that it is often absolutely central to the case. Are we then going to have a whole stream of things where there is a reduction in competition, so we find an SLC, but then, when we are considering the remedies, we decide not to remedy because we can say that there are these efficiencies that were passed on to customers?

PROFESSOR WHINSTON: I guess that one way of doing that two-step process in the horizontal case is that, in effect, there is a certain sequential decision-making process. We are going to first ask, if there were no efficiencies, would there be a problem?

MR JOHN DAVIES: Yes, exactly.

PROFESSOR WHINSTON: Efficiencies are hard to judge so we are only going to do that if there is a problem in the absence of them. Then the second step is that we will go and do that. You could ask the same kind of hypothetical question ...

MR JOHN DAVIES: Well, can you ask it? That is a very good characterisation of the problem.

PROFESSOR WHINSTON: You can for certain kinds of efficiencies. There are some efficiencies from the vertical merger that are really direct cost reduction efficiencies. Those you could ask in this way. You could say that, suppose there were none, do we think there would be a problem

from this or a significant problem? Maybe some of the ones that are harder are the efficiencies that you think are, actually, pricing kinds of efficiencies, like elimination of double marginalisation. I think that it is harder to separate that out.

PROFESSOR SLADE: It sounds like in this two-stage process you are going to take something like these complementarities in the first stage as harm and then turn it over in the second and make it a benefit.

MR JOHN DAVIES: That might well be so.

PROFESSOR SLADE: That seems very strange to me.

MR JOHN DAVIES: OK. But equally, it would be very strange to do a non-horizontal merger through an entirely separate process from the way that we do horizontal mergers. That would be really hard, not least because we do not always know, when it comes in, whether it has vertical effects or not.

CHAIR: And very often the same merger has horizontal and non-horizontal aspects. One question that comes out of what Mike just said is whether we should be treating cost efficiencies and pricing efficiencies differently. For example, whether the pricing efficiencies should perhaps go into the SLC analysis in the first place, while cost efficiencies are looked at on the customer benefit side. While such cost efficiencies are more observable, they quite often fall apart under testing.

Another question that I would like to throw into the mix here is whether we care about consumer benefits or about rivalry? For example, we might think that overall we care about productivity and we do not want mergers to harm long-term productivity. If so, which of current consumer benefits or current rivalry is the better proxy for future productivity. I wonder whether there is also a distinction between these pricing effects and the cost effects, so that the cost effects clearly lead to an immediate improvement in productivity whereas the pricing effects benefit consumers but do not necessarily impact on productivity. There is a whole series of questions there.

PROFESSOR JULLIEN: I agree with what you say. I was a bit surprised because, when you do a horizontal merger, you take all the price effects and you say that, the price increases. Now you have a vertical or a conglomerate merger and then you do not say that, "I am looking at the price, and the price decreases." You say, "I do not look at the price and then I am going to treat the price increase as an efficiency defence." It is not an efficiency defence. It is a price effect, so it should get into the first stage.

In that sense, it is good for consumers, because of the price effect. Then you have this negative effect that can add, which is foreclosure or whatever. I do not see the rationale for having an asymmetric treatment of the price effect between the vertical and horizontal mergers.

MR JOHN DAVIES: Because it is externality which is internalised as a result of the merger, one way or the other?

PROFESSOR WHINSTON: That is consistent with the view that the second stage would be about cost efficiencies, while the first stage would be about pricing and foreclosure incentives all together.

DR PADILLA: In that respect what I wanted to say is that, and I think that this is consistent with what Bruno is saying, when we talk about the efficiencies of vertical mergers, many of them are rivalry enhancing. If you think about double marginalisation, a vertical merger means a reduction in your cost that is going to allow you to price more aggressively, so it is rivalry enhancing; the others are going to have to merge. When you think about another typical form of efficiency in vertical mergers, which is that you are able to launch new products or to improve the existing products by coordinating upstream inputs with the design of the downstream products - for example, this was the case with TomTom/TeleAtlas - again this is rivalry enhancing because it is introducing new products into the market and competitors are going to have to react to that, either by innovating themselves or pricing their existing products more aggressively. I think that all these should go together with any potential anti-competitive effect in the assessment of efficiencies.

The only kind of efficiencies that I could think would form part of a second step - a kind of efficiency defence - would be organisational changes or other changes that could be associated with the process of vertical integration in the way that production is rearranged and the way that existing external contractual relationships are brought into the firm, which would allow some form of synergies that may or may not be passed through. Those are the ones that I would consider in a second stage.

PROFESSOR KUHN: I am a little confused about what you just said and I guess that I am also confused a little about what the SLC test is. If I bring two guys together, it is either substitutes or complements. If it is substitutes, the price tends to go up; if it is complements, the price tends to go down. I have always been thinking about all of these tests as just saying, well, what is the price test? How does the price move? That is, basically, our

first screening and everything else we are going to treat as efficiencies afterwards, because it is much more about analysing hypotheticals than the price, where we can, in principle, see what demand is like to at least try to project what the price effect is going to be. Those are two very distinct things. When, Jorge, you were talking about enhancing competition through introducing new products, I am not sure why I would want this at the SLC stage test and not at the test of the efficiency offence, because it is much harder to derive a counterfactual.

DR PADILLA: And, to be frank, I am not sure either. I think that I was trying to adapt or match my thinking to the language of rivalry-enhancing efficiencies and non-rivalry-enhancing efficiencies, which I think belongs to the legal framework here.

PROFESSOR WHINSTON: To go back to the horizontal analogy, if you have aspects of dynamic competition that are being affected by horizontals, at what point do you want to consider them? If you were talking about horizontal mergers, it would not be entirely clear either. We are used to the idea that the first thing that we do is look at the price effects, because those are the things that we understand the best. Then there are these other things that are harder.

PROFESSOR KUHN: I think that that is a good discipline to have in the process.

PROFESSOR WHINSTON: I think that the same issues come up here.

PROFESSOR SLADE: Can you explain how you do this lessening of competition if you do not look at the price effect?

MR JOHN DAVIES: I think that that is part of it, but I think that what is additional within the SLC test goes to what Amelia was saying, not necessarily around productivity, but an SLC as being a reduction in rivalry (as perceived by the Competition Commission) that might lead to worse outcomes for consumers in the longer run than the immediate price effects.

PROFESSOR SLADE: But you do not do that for horizontal.

MR JOHN DAVIES: We do do that for horizontal.

PROFESSOR SLADE: You look at long run?

MR JOHN DAVIES: Yes. I think that the CC could well find an SLC in circumstances in which it did not think that, in the short term, the prices were likely to increase, if there were damage to long-run rivalry between firms in the industry. It would only do this if it expected that detriment to consumers to arise from that, of course - otherwise it just becomes a sort

of structural test.

MR WALTERS: OR if the authorities thought that some other strategic variable other than price might be adversely affected in the short-term, quality or service. Price is not the only strategic weapon that firms use.

DR WILLIAMS: I think that that is very important, because we have got the static and dynamic. If you look at the typical vertical merger, you could say that the two probable effects are elimination of double marginalisation, which will lead the integrated entity to lower its retail price, and, secondly, one might, because of the quasi-diagonal effect, expect there to be some increase in the supply terms to the non-integrated firm to soften their position vis-à-vis the integrated firm, so you get both of those together.

What is the overall effect of this? I think that you can do some analytics on it. You might just want to form a view about what is going to happen there, but then there is still the fact that, even if prices fall, the non-integrated firm appears here to be weakened in some meaningful sense of the word "weakened", but then does that matter if prices have fallen? Answer: possibly yes, provided that it impedes long-run rivalry in an important way. Then, of course, in those sorts of exercises, although theoretically we know that they can be there, they are incredibly difficult to coherently write down theories of harm for and then evaluate.

DR PADILLA: I think that there is a danger there, which I had not thought about before, but I am starting to get concerned about, which is that just before leaving for coffee we said that efficiency offence theories were dead. I think that they seem to be re-emerging.

CHAIR: There is one question that just struck me that I think is worth discussing very briefly. Typically, in a horizontal merger we would think about the potential for entrants to come in and, therefore, limit any anti-competitive behaviour. Or, indeed, the potential for buyers to play the remaining players off against each other or reintroduce competition upstream. That is we typically think about the strategic reactions of other players in the market. In non-horizontal mergers, we talk a lot about the impact on the non-integrated firms. How much should we take into account that those non-integrated firms could overcome such problems by themselves by integrating? In TomTom/TeleAtlas it was clear that the competitor firms were actually in the process of integrating as well. How much should we just say that, OK, they can integrate too, and therefore no problem?

DR WILLIAMS: That is an interesting question. I think that it may go back to

questions that arise in market investigations. Peter probably knows more about this than anyone in the room, but there are these stories going back to the 19th century and the beer industry where one brewer ----

MR FREEMAN: Thank you, Mark!

DR WILLIAMS: I was referring here to experience in the beer industry. The theory was that one brewer would buy a pub in order to get a guaranteed outlet for its product and, once that starts happening, the number of free outlets starts falling so then other brewers start to get nervous that they will not get access, so then they integrate. At that point, when you start looking at the first integrations here, you can say that there is no issue because there is a counter-strategy and everyone else can integrate. But then you, basically, create the snowball effect and you end up with the alternative industry structure of vertical integration. Now, the question of whether that industry structure is better or worse than the first one is a difficult question, but, whenever you start saying that counter strategies are available, you are here going to lead to a different market structure. Then the question is, if, in fact, you think that the eventual market structure is inferior to the original market structure, is that the situation where, actually, you want to stop this before it snowballs or do you wait to the end and then have a beer inquiry and unscramble it all?

CHAIR: Which goes to the question of whether it is appropriate when assessing merger number one, to think about the likely impact on mergers two, three, four and five? Or would it be far too speculative to prevent merger number one on the basis, of what is going to happen in all the follow-on mergers?

CHAIR: It is an interesting question. Mike?

PROFESSOR WHINSTON: What do you want to know?

DR WILLIAMS: You, Professor Whinston, are doing some work on this!

CHAIR: Is Mark correct in saying that you are doing some work on this?

PROFESSOR WHINSTON: That is true in the horizontal sense. I could tell you what the theorem is. I think that the question of looking ahead to other mergers is something that you want to think about. I do not know yet if we know necessarily the right way to think about it, but I think that it is an important question. I do not know whether you are going to come to it, but at one point in these notes you talk about vertical effects of horizontal mergers and, when you start thinking of mergers over time, one of the things is that a given vertical merger, its effect may depend on

whether there are later horizontal mergers. There are vertical mergers that under the current market structure would be benign, but, if later there is a horizontal merger, you would regret having done that vertical merger, even though the horizontal merger itself was good. You can have a sequence of a benign vertical merger, followed by a good horizontal merger, but, if you knew that that was what was going to happen, you would prefer not to have done the vertical, doing the vertical would have been a mistake.

CHAIR: That is an incredibly interesting question. I do not know if we have come across one like that.

DR PADILLA: I think that there was something like that. If you look at what happened five years ago in the beer industry in France, there was a sequence of small vertical mergers between brewers and distributors, all of which looked rather benign and all of which were cleared on the basis that there was not much market power in distribution or at the brewer level. Then there was high concentration at the brewer level and, basically, there were barriers to entry, because everything was vertically integrated, and competition in the industry became quite weak.

PROFESSOR WHINSTON: Just think about your 30 per cent safe harbour. If there is a later horizontal merger, even though that horizontal merger is good because it generates lots of efficiencies, that initial safe harbour would not have been met. It changes what the vertical effects are.

DR PADILLA: I wanted to come back to the point about how to treat the first merger when you know that there is going to be a second merger. Again, going back to practical experience, that was a question that was hotly debated in the context of TomTom/TeleAtlas, because TomTom/TeleAtlas was filed, and a month later or even less than that, Nokia/Navteq was up in the air and everybody knew that it was going to happen. There was quite a bit of debate about what the right counterfactual was for the analysis of both the TomTom/TeleAtlas and Nokia/Navteq deals. Was the right counterfactual one in which the other merger was assumed to have happened or not? In the end I think that the decision was - not for economic reasons, because I do not think that the economists shed much clarity on that, but for purely legal issues - that the analysis of TomTom/TeleAtlas was going to be conducted under the counterfactual of no merger. That was the way that TomTom/TeleAtlas was decided - as if Nokia/Navteq was not going to happen.

CHAIR: Then that leaves a very difficult problem, because that means that in

Nokia/Navteq the right counterfactual is that TomTom/TeleAtlas has occurred. This in turn raises a question about whether you might want to prevent the second merger even if you did not prevent the first, which could be problematic in that you would be disadvantaging the second merger simply because they happen to enter the merger approval process a month later.

DR PADILLA: Absolutely. There was lots of gaming. Some said that the second merger was going to be disadvantaged. Some others considered that the second merger was going to be advantaged. Nokia and Navteq waited to see to some extent what was happening with TomTom/TeleAtlas, so perhaps they thought it would be better to be second, because, if they cleared the first, it was going to be difficult for all sorts of reasons, economic and non-economic, to prohibit the second. But that is an interesting issue.

There is just one other thing. The other element of discussion related to this in the context of TomTom/TeleAtlas was a recent paper by Jerome Pouyet and co-authors about merger waves, a wave of vertical mergers, where they argued with another specific model that the first merger may be fine but the second merger is necessarily anti-competitive. Again, it is a very specific model. I think that the debate was in the end closed because the assumptions that were necessary for that model to hold did not really apply to TomTom/TeleAtlas, but I think that there is some interesting literature building up about the competitive effects of vertical mergers when you take into account the possibility of merger waves.

DR WILLIAMS: I was just going to make the observation that, of course, this raises interesting questions with regard to the legal framework as well. I have certainly been in hearings in the past where someone has said that, well, if you allow this merger, you will have to allow that merger, to which the reply from the relevant panel chairman was "No, we won't. We will just block that one". But, of course, the main thing coming out of this is the recognition that some of those later mergers, when you actually get there, are actually pro-competitive in the circumstances in which you find yourself. That is the key recognition that I think causes real analytical difficulties but real practical problems as well. I can well understand that every agency says that we have just got to look at this merger before us. I do not know exactly what the legal test is, but I could imagine that you could start getting into difficulty legal territory if you start basing a merger decision on speculation about future mergers that have not happened yet.

PROFESSOR KUHN: What worries me a little bit about this discussion is that we are discussing this as if all these vertical merger waves are just a product of strategic interaction. We believe these vertical mergers to a large extent come about for efficiency reasons - that something in the industry has changed that changes the optimal organisational structure for firms. So, if we are seeing one vertical merger and then we see a kind of whole wave, that is something that is much more likely in vertical mergers than it would be in horizontal mergers, because it tells us something about fundamental underlying change in the optimal production structure of the industry. Coming at this just from the lens of how can we construct something where there are vertical interactions, which are strategic, so that the first ones change it for later, I think is very dangerous, because we are starting to forget our premise here that we think most of the time that these things are actually efficiency enhancing. This is intellectually very interesting, because it is drawing us really down this road of saying that, oh, there are these examples that we construct, is that not interesting? I think that that is very dangerous. Just by thinking about the dynamics, we are quite willing to throw out the discipline that we usually have, and I think that that is a danger of that type of discussion.

CHAIR: So it would be a better presumption to forget about the later merger wave that might occur other than to think about it as a response to an SLC?

PROFESSOR KUHN: Without disputing anything that anyone has said, for the process, I think, I am worried.

DR WILLIAMS: If I can add one other thing there, of course, again, you can be more sanguine about that in a world where you do have market investigations.

CHAIR: Absolutely.

PROFESSOR STEPHEN DAVIES: Steve Davies, University of East Anglia. I want to change track away from the merger, so, if there are any more questions ... OK. It is to respond to your tease about productivity. It is really to throw it back at you. I am not quite sure where that thought process goes. Amelia's point is that, if we value productivity, then maybe we want to pay extra attention to any cost savings. But is the logical extension of that thought process, if one does care about productivity, that one might actually be persuaded by cost savings even absent any pass through? It seems to me to be a dangerous train of thought.

CHAIR: I think that one needs to think short term and long term always on these things, does one not? Therefore, yes you are right; there may be cost savings, which, yes, you are right, would in the short term help total welfare. But if there was no pass through, this would not do anything for consumer welfare. The next question, though is what would happen to costs over the longer term. Then the question is whether short-term consumer welfare is a good proxy for what would happen long term, in terms of incentives to reduce costs further?

MR COLLINGS: You raised the question earlier about strategic customer behaviour and it sort of got lost. Could I put it back on the table because it was a point that I was going to raise, largely because of my own experience rather a long time ago last century where we brought a merger to the MMC, the predecessor of the CC, which looked like a very major customer foreclosure issue. The MMC actually cleared it, which was to the detriment of the shareholders of the acquiring company, I have to say, because, actually, there was a lot of strategic customer behaviour that sort of pushed back against the foreclosure. Now, I think that there is an interesting question about the circumstances under which that would be a credible outcome. I think in this particular case it was because the product concerned was extremely strategically important to the buyers, so it was worth them doing it and I think, intrinsically, because it was important, they did not want bundled products, so they were pushing back very hard against bundling, and there was rapid technological change. Although I have actually seen it, I have a nasty suspicion that it is probably, actually, a fairly unusual outcome. I thought that I would bring that back on the table because we did not really deal with it.

CHAIR: I talked to Kai-Uwe briefly about GE/Honeywell at the break. One of the questions that came up in GE/Honeywell was that, if the story of harm here is that the bundling will extract customers away from the people who provide single components, is that not really up to the customers? If they want to keep those competitors in the market, would they not pay a higher price and not accept the bundle? Presumably this comes down to how forward thinking are the customers and how much do they understand that, if they extract a lower price in the short term, they might foreclose other players in the longer term. There is also a potential issue of free riding between customers. If there is just one customer, you might expect it to act strategically in that way. If you have two customers though, it may be very costly for one for act strategically in that way, if its competitor does not, because the competitor will then

steal a march on you in the short term by having lower prices. This gives rise to a good question; whether we should get into buyer power specifically and separately in respect of vertical or conglomerate mergers. We will have a whole section on buyer power here, but I do not know whether buyer power in our guidance, but I do not know whether buyer power in this particular environment should be treated any differently. Are there any views on that?

PROFESSOR KUHN: I think that it is different from your usual horizontals, unless it is effectively vertical, because you have larger buyers that are firms at the other end. I think that the GE/Honeywell example is a good one. I remember having that discussion. We had two really large companies as the buyers who were practising second sourcing. You see this a lot when you have large buyers: that they are practising second sourcing for precisely those reasons. I think that when it comes to vertical foreclosure, the buyer power argument is a much more relevant one, because, effectively, you can give the finance for investment.

PROFESSOR WHINSTON: When you start asking about the incentives, what would it actually take you to effectively foreclose? What the buyers are going to do and how they are going to react to your strategy is the important aspect to that.

DR WILLIAMS: But I do not think that you should underestimate the other issues.

CHAIR: No.

DR MAZZAROTTO: Is there also a general issue of recognising that these stories of foreclosure apply to intermediate markets and therefore one has to take into account the sort of broad bargaining setting in which these markets operate? Does this not also imply that it is more difficult to establish safe harbours that are meaningful and that are general enough to be comfortably applied across a set of industries where, again, the bargaining may be substantially different?

CHAIR: Coming back to GE/Honeywell, despite it's being history, one of the big questions in the bundling story in GE/Honeywell was that this is a negotiation market. Much of the bundling literature, by contrast relates to situations where the upstream players set prices not knowing the valuations of all the downstream buyers. How much do firms learn about the valuations of your customers through the negotiation process, and how does that change the story? Are there any thoughts on Nicola's point?

PROFESSOR KUHN: The question was, I think, specifically on the safe haven. I do not think that GE/Honeywell would have fallen under safe haven. I think that, even in markets where there are lots of negotiations going on, if there are enough competitors around, we would say that it is not that different. Maybe what a reasonable safe haven is for one or the other markets is not the same, but, just for practical purposes, since the 30 per cent is such an arbitrary number, anyway, I do not see why it should be different for negotiation markets than for others. This is kind of like a reasonable benchmark which was set. If there are enough people around effectively competing, whether it is with bargaining or setting prices, it does not matter that much, it is the sense in which we are using the safe haven.

CHAIR: I get a sense that, because these are upstream markets, we are saying that all the players in it are likely to be wise and market savvy, and thus there may be an extent to which it provides a further reason for scepticism about the potential for harm in non-horizontal mergers. Is that a fair flavour of it?

DR PADILLA: I think that it goes back to what the structure of the market is, both upstream and downstream. For buyer power arguments, you need to have some degree of concentration downstream. You also need to have some degree of fragmentation upstream. If what you have upstream is a monopoly, then there is not much that you can do other than thinking about sponsorship of new entry and then you know what you have to investigate to see whether that is possible or not. Again going back to practice, what kind of vertical mergers get lots of attention and go to second phase? Typically, there are strong debates about those where you have a monopoly upstream. When you have an upstream duopoly, then there is less reason to be concerned and, if there are more than two players upstream, then the degree of fragmentation upstream is relatively large and there is no reason to be really concerned.

MR JOHN DAVIES: When you say a monopoly upstream, do you mean pre-merger or post-merger?

DR PADILLA: This is vertical, I think.

MR JOHN DAVIES: Yes, there is the theory of harm where there are two upstream and three downstream, then one becomes vertically integrated, leaving the other as a residual monopolist over the other companies.

DR PADILLA: Actually, the example that I had in mind was a monopoly pre-merger. That is the sort of typical example of a vertical merger that you

see. TomTom/TeleAtlas was the second situation. Under the total foreclosure story, what would happen is that there would be a monopoly post-merger, because the vertical merger would actually take one of the suppliers out of the market. That was the allegation. Those, again, are difficult from the viewpoint of buyer power. Again, there are other considerations.

One thing that I would like to mention is that there are some interesting vertical mergers where the vertical structure is a little bit more complicated, in which you have an upstream market, a midstream market and a downstream market, and the merger happens between a downstream players and a midstream player. It could be an intermediary, so think about farmers, intermediaries and manufacturers. Those mergers pose interesting issues, because, if you have a merger between downstream and midstream players and the midstream player does not controls the upstream market, then it is possible for downstream players to bypass the midstream player to deal directly with the upstream players. This is important because it weakens the concerns of potential foreclosure of the downstream market. They look superficially identical to the standard vertical mergers, but they raise issues of buyer power and counter strategies, which are far more interesting.

PROFESSOR WHINSTON: Coming back to Nicola's question just for a second, it is worth remembering that, if you are thinking about negotiation markets, that also has some effect on whether you think certain efficiencies will be realised. You might think that the double marginalisation story is not as much of an issue if you are in such a market. I kind of agree with Kai-Uwe. Since I started this off by saying that I do not know where 30 per cent comes from, I end it by saying that I do not know where 30 per cent comes from. I do not know if it would change my view about what the safe harbour would be, but it has effects both on the strategic behaviour for foreclosure and also on other strategic behaviour.

PROFESSOR LYONS: Everyone is talking about GE/Honeywell. It is going to become one of these great examples. There may be something about this, because there was GM-Fisher Body, which has been reinvented and reinterpreted for probably 40 years now in terms of some aspects of vertical efficiencies. GE/Honeywell will be used for years and years, I think, for these other things.

One interpretation, and I do not know whether it is right or not, of the difference between what happened in the States and what happened in

Europe was that, suppose there is an expectation that there will be some form of mixed bundling, price discounts, which will be beneficial to people and people will, therefore, switch to the GE/Honeywell products, and that these are not predatory, they will continue long term, but Rolls Royce will exit the market. Then the issue is, will this affect future innovation in a market, which is very difficult to re-enter? A view of what happened was that the European Commission thought that that is very important in terms of thinking about the future and the American view was that, well, that is highly speculative, we cannot go that far down the line. I would be interested to hear what people think about how much you can take innovation into effect. Mike might be particularly interested in this because he has written in a slightly different context about the innovation of vertical contracts, anyway.

PROFESSOR WHINSTON: When you described the GE/Honeywell thing as pricing in a way that the customers like, my first reaction was going back to the efficiency offence argument. When I said that it is easy to put together, I said that it is easy to put together a story where a cost reduction is bad for consumers. I did not say what it was, but what is it? One firm reduces its cost, the other firm now has lower profits and exits. A generalisation of that is that it does not invest as much in the future. My first reaction to the way that you were describing it, at least the way I heard it, was that it was a lot like an efficiency offence story.

PROFESSOR LYONS: Not an efficiency offence in terms of a short run, but this was the argument that was running around Europe at the time, that this was important for future development of consumer benefits in five, ten or 20 years down the line.

CHAIR: Should we be particularly concerned about losing rivalry in a market, which is very innovation focused and with huge barriers to entry? I think that it was pretty uncontroversial that there were huge barriers to entry in that market.

PROFESSOR WHINSTON: Just going back to what I said before, I cannot think about how to react to that just focusing on the particular circumstances, but rather about the entire administrative apparatus and what it means if you start listening to those arguments: how easy it is to make them, how easily you are going to be able to distinguish between whether it is a valid argument or not.

DR MAZZAROTTO: Is there another way of looking at it, perhaps, which would be that the issue is, one of taking into account all of the strategic

variables that are available to the firms and analysing the outcome of the merger in terms of all those variables? If that the analysis suggests that there are, say, pricing efficiencies coming out of the merger, and therefore the merger might actually reduce prices, but at the same time there is a detrimental effect in terms of the research and development's strategic variable or other variables, then, in principle, I would think that that is something that we would want to take into account. The question then becomes that, given that you can probably be more precise in terms of estimating the effect on prices than you can be about research and development, does that really mean that one is supposed to shy away from making a finding of detriment based on lower research and development? Is it not important actually to go further down that line?

PROFESSOR WHINSTON: I do not know the answer. I think that, in the context of this efficiency offence thing, for the same reasons, like 45 minutes ago when we started talking about what step in the process pricing comes in, is it part of the first step or is it an efficiency and all the rest, I am not quite sure. When you get into the vertical issues and one of the efficiencies is that the customers like the bundling or they are going to get rid of double marginalisation, is that an efficiency offence argument, if you start tracing through the effect? I am not sure where I come out on that.

CHAIR: I guess a general question here is that it tends to be a lot more speculative to think about what is going to happen to R&D than about what is going to happen to prices or immediate cost? On the other hand, R&D is arguably what we really care about. If you compare long-run dynamics versus short-run dynamics, long-run dynamics pretty much always win out in terms of customer welfare. Have we almost got an impossible task in merger policy, in that we are inherently looking at the wrong thing?

DR PADILLA: I have just one comment. Yes, we do care about dynamics, but I think that we have to be careful with some arguments that are put forward in that respect, in particular when we may be sacrificing tangible short-term efficiencies for long-term improvements in consumer welfare.

The argument about the negative impact on efficiencies that may translate into reductions in profits of a given company is very easily made, but very often does not make any sense. The first question that you have to keep in mind is that, well, let us look at the track record, let us look at history - where are the innovations coming from in this market?

Are they coming from laggards in the industry, or do they come from new people entering the market? That is very important.

Then there is a very obvious question. You tell me that you cannot do R&D because you do not have enough cashflow. Well, if you have such a brilliant idea, why can you not go to the capital markets and get funding to do this? What are the capital market imperfections that affect your company? In particular, if your company is a long-established company, it is a mature company, it is not a start-up, it has been there for quite a while, what is it that is preventing you from raising this capital from the capital market and getting that brilliant idea realised that is going to allow you to leapfrog over competitors?

I am not saying that you should ignore long-term effects, but I think that they have to be scrutinised with the same level, if not a greater level, of strictness and rigour than the short-term effects, precisely because they are very, very speculative.

DR WALTERS: I think that, perhaps, this is an area where the law can help us. The substantive test that we use is whether a merger gives rise to a realistic prospect of an SLC at phase one or an expectation of an SLC at phase two. If SLC is based upon trading off quantifiable short-term pricing benefits against nebulous long-term harm to competition, then it is not obvious to me that that is consistent with forming an expectation or even a realistic prospect.

DR WILLIAMS: We do it in transportation cases.

CHAIR: We do.

DR PADILLA: I was going to say almost the same thing. It is highly speculative. I could as well articulate a theory explaining that they are going to invest more in innovation, because now they are in a better position. You need to be very careful when you start to considering very speculative stories about what is going to happen in five or ten years, unless you can really provide real material that, in fact, they will not innovate. I do not see how you could make an argument like that.

PROFESSOR KUHN: This is going to sound repetitive. I think that even in horizontal mergers, where there is no R&D involved, but just consensus for investment for expanding capacity in anticipation of the demand that opens up, we are not actually very good at predicting that. I have seen a couple of these merger simulations now in these types of markets and, even when you think that you have the short-run model kind of OK, you can throw up your hands as soon as it comes to investments. I think that

we just have to admit that. Given that that is so uncertain, I think that it is right to almost discount that to some extent, although we know that potentially the effects are much greater.

MR JOHN DAVIES: If we have that sort of complete uncertainty, presumably, then knowing what we do about vertical mergers, (reinforced by the work that Margaret was talking about) we should then err on the side of allowing them?

DR WILLIAMS: We have all agreed that, if somebody is actually put out of the market in a market with incredibly high barriers to entry, you have then got a very serious problem. It is true that these things are distant and you discount them, but also, with the passage of time, the speculation gets greater so you discount them, but the end effect, if it happens, is very serious. Again, it comes back to an expectation. Is this an expectation in the sense of something that will probably happen or is it an expectation in the sense of an expected value?

MR JOHN DAVIES: Let us not go there today.

DR WILLIAMS: I am merely saying that I think that this is actually coming back to this question of, what do you do about a ten per cent risk of the end of the world? Answer: that sort of risk worries me.

CHAIR: Absolutely. I am going to try to move the conversation on, to impinge on this afternoon's conversation, actually. Obviously, a significant part of the non-horizontal guidance is about collusion and how vertical and conglomerate mergers might affect collusion. I have to admit that I am not aware of cases that have looked at this; others may be. How realistic do people think this is as a theory of harm? What does it mean for the 30 per cent test? Does that remain a sensible test if you are worried about collusion? Also, do we feel differently if it might be tacit collusion than if we are worried about explicit collusion? I will ask the panel first if they have any thoughts?

PROFESSOR SLADE: I was waiting for this because, as far as I know, there is almost zero empirical work on this. Given that fact, I sort of suspect that it is not a big issue. Most of the foreclosure studies were taken from actual cases. Again, it is a real theoretical possibility, but I have not seen anything very convincing about the practicality of it.

DR WILLIAMS: All I would say is that the theoretical literature on this is quite new. There is one recent paper, Nocke and White, on this. It is not surprising that we have not got too much empirical testing of it because we have only really in the last couple of years become aware that ...

PROFESSOR SLADE: They have been around for quite a while, the collusion thing.

DR WILLIAMS: But I am not aware of it in cases - I do not think that the fact that we have not tested it is the question. I think the question is, do we believe that the arguments are actually going to really happen in real markets?

DR PADILLA: As a matter of theory, I think that we have this in Nocke and White, which I think is unsatisfactory for a number of reasons that we can get into. It is a brilliant paper in many respects, but in my opinion it is not a useful tool for policy for a number of reasons. There were older contributions similar to those that link vertical restraints to the likelihood of collusion. It depends on the degree of asymmetry across different players in the vertical dimension. I am not aware of any empirical work that supports those views, however. In terms of cases, yes, it has been debated sometimes, but it has been discarded pretty quickly. Coordinated effects were discussed in TomTom/TeleAtlas and Nokia/Navteq, but the particular flavour was that these two mergers are taking place because they are a way to partition the downstream market between TomTom and Nokia - Nokia would monopolise the provision of maps to PDAs and mobile devices and TomTom would monopolise the PND market - and with the structure that would emerge after the two mergers, they would not have the incentive to penetrate each other's market. This sort of coordinated effects story was discarded at some point because it did not look very reasonable on the facts. The guidance is pretty imprecise about how it would treat vertical mergers in the context of coordinated effects. I think that the only thing that exists is something that says that if, as a result of this vertical merger, you have an industry that is much more symmetric, because you have symmetrical vertically-integrated players, then it looks like collusion is going to be easier, but at the moment this is quite new territory.

PROFESSOR SLADE: Again, I do not see it as being very different from the stories in horizontal. One of the big issues is, suppose that everyone is vertically integrated, then you have no temptation to cut price to increase your market share. Well, that kind of issue we have known about for decades, yet we have not seen much evidence that that has happened.

CHAIR: I might come to Valerie in a minute and see if she knows of any evidence. But Mike.

PROFESSOR WHINSTON: I do not think that I have anything useful to say about it.

PROFESSOR SUSLOW: There are not very many collusion cases that I can think of where the vertical merger issue would have been involved. There are some historical examples where vertical mergers were implemented by customers trying to try to destabilise upstream cartels. Diamonds might be an example where vertical mergers (or vertical integration have generally) facilitated explicit collusion. But in general, I don't think it is a big issue.

PROFESSOR JULLIEN: Price becomes ...

CHAIR: Yes, which goes in the other direction.

MR JULLIEN: Nothing stands out in that, but it is the same tool as you use for all the cases of tacit collusion and, if it is a factor that affected or not, that would be very marginal.

PROFESSOR SUSLOW: The biggest issue is distribution. If they control distribution, rather than selling to brokers or middlemen, then that is an issue.

PROFESSOR KUHN: I had, basically, the same view as Margaret about coordinated effects on conglomerate mergers, which you might think may matter because of multi-market contact theories. I thought that this was even silly to work on because this would never happen in reality. I have been proved differently. I was actually involved in an EU case where the merger fell apart for other reasons, but the main theory that the Commission was trying to argue was one of coordinated effects of this conglomerate merger. It was kind of two related but different markets. There was one big incumbent firm active in both markets. There were two other firms active in one market. The other one in the other market. And the merger here. And I said, "Ha, now we have got multi-market effects, therefore, it is bad". That is what they tried to argue. I never thought so, but in the end I kind of wrote a paper on coordinated effects in conglomerate mergers, just kind of looking at these incremental things. If you think about it, this is actually an issue that is of importance in a lot of horizontal mergers when multiple geographic markets are involved. When the market shares are quite different and there are different horizontal markets, you, effectively, have the question, when you want to apply coordinated effects theory, whether there are conglomerate effects, so that you should be analysing on a global level instead of a market-by-market level, when you think that that is relevant.

I do think, theoretically, that one can say some things, for example, are much more important when you are asymmetrising across markets than when you have within-market asymmetries. If you are actually at the global level, suppose you are big and one is smaller than the other, and vice-versa, then you get two similar firms, maybe, across ... Then look at the aggregates, that might be a sort of collusion, for example. I think that those cases are very, very limited and, actually, what one has to understand is that the effects might be very small or you might, actually, even get things where, even if you raise the price in one market, it will go down in the other.

I think that it is not very reasonable generally to go after these things. I think that it will open up a can of worms. But it is not as if this is not going to come up as an issue. They have tried in this case and I think that, if they seriously do this in horizontal mergers and want to add coordinated effects, it is going to arise in that context as well. It is not a complete non-issue.

PROFESSOR SLADE: What you are saying is that, yes, they use this theory, but I was saying that I have not seen any evidence that actual mergers have produced these effects.

PROFESSOR WHINSTON: In the case of conglomerate mergers, there is some evidence. There is some work that has been done.

PROFESSOR SLADE: I do not actually know the conglomerate literature that well.

PROFESSOR WHINSTON: It is on airlines.

CHAIR: I wonder whether there is a difference between conglomerate and vertical here, because I can see personally see this better for a conglomerate merger than a vertical one.

PROFESSOR LYONS: The point that I want to make is that information flows are really important sometimes in vertical cases. I can think of two UK cases. There was BskyB/Manchester United and also Centrica/Rough. Following a vertical merger, price information can be transmitted within an organisation without fear. Let us say that you are getting information about the input costs that a rival is having. Now, generally, in those cases it is not a collusion issue, but it is something to do with getting competitive advantage in a more unilateral way. But, separately, we know that information flows through suppliers can be very important for cartels. We know how difficult it is to find information about cartels because it is all secret behaviour. It seems to me entirely plausible that, in

some circumstances, you could importantly risk certain information flows becoming possible, which would facilitate collusion by signalling prices to each other.

CHAIR: That is interesting because the information flows point is discussed here in the guidance but very much in terms of the foreclosure story. I guess that they are talking about collusion separately. That makes a lot of sense.

PROFESSOR STEPHEN DAVIES: I have just a quick observation. I can think of one case, almost the current case, really, where, at an intuitive level, people are arguing this sort of question. It is, basically, electricity in the UK where there are accusations about tacit collusion amongst the retailers and part of the accusation is based on the loose accusation that this derives partly from their vertical integration with generation. It is not an answer to the case, but it is an interesting one to think about.

DR PETER DAVIS: I have one question on a direct issue that comes to mind, which is whether structural remedies are, at some level, the appropriate response to information flows. More broadly, I wanted to ask about the general policy stance and on the status of the evidence base that is informing the policy stance, both on the collusion side and on the non-collusion side. An analysis of the empirical work has been done on the academic side by colleagues in the room. You can go down the list of academic papers and your tables make it pretty clear that the evidence base here for a policy stance shows, in general that consumers appear to win from vertical mergers or restraints. My question is how to treat evidence from the case work? There are quite a considerable number of cases where, both in the ex-post and in the ex-ante vertical world, vertical concerns have been raised and conclusions have been reached by agencies, which have said that, actually, this is bad in terms of effects. So, as we think about the empirical evidence informing the policy stance, is there really a tension between the behaviour of the agencies and the empirical evidence that has been collected through the cases on the one hand and the academic work on the other or not?

At the moment, we look at this tension and say that, OK, well, perhaps that says that, probably, the agencies should not be doing very much of this kind of activity. But an alternative view would be that, actually, in the round the evidence base is a little bit more mixed than looking at just the academic literature would suggest. I just wonder if I could get reactions to that.

PROFESSOR SLADE: We do not have access to the non-published. There may be lots of studies that are done for cases, but it is not in the public domain, so it is very hard to evaluate what they would actually tell us, if we knew about them.

DR PADILLA: That is a very good point. There is very little in terms of post-mortem analysis of vertical mergers. It would be very interesting to see when a vertical merger had been cleared what has happened afterwards in the industry.

CHAIR: I am going to turn to Chris now to do an advert. We are doing an ex-post review - we have asked Deloitte to do it - of a series of cleared mergers, some of which had ...

MR JOHN DAVIES: Not all cleared, actually.

CHAIR: OK. My question was, are there any verticals or ...

MR JOHN DAVIES: Yes, EWS/Marcroft.

CHAIR: So watch this space! Generally, I think that we would all agree that in these areas, more empirical facts are just crucial, really.

DR PADILLA: It would be interesting, if I could make a suggestion, if we had a prediction of what the outcome of those market studies is going to be.

CHAIR: We will set the odds at lunchtime.

DR PETER DAVIS: We do have a number of post-enforcement actions. There are certainly statements of case. There have been decisions, which go against the behaviour. We do have reports on individual merger cases, which have gone against them. I guess the question, in terms of the policy stance, is the weight that should be given to that experience in cases relative to the work which has been done on the academic side. It fed into your question three which you skipped over slightly. In defining the policy stance here, the academic literature leads you it seems quite strongly to the view that this is not an issue and we should just let such mergers through. The case law, both ex-ante and ex-post, seems to lead you not quite to that conclusion. In terms of a big picture question for the stance of the guidance, that strikes me as quite important.

MR JOHN DAVIES: And, in effect, is that case law wrong? That would be another way of looking at it. There is a contradiction there, you are quite right.

DR WALTERS: I think that that is more because the case law often is not about pure vertical mergers in the TomTom/TeleAtlas and Nokia/Navteq sense.

It is about horizontal mergers where one of the firms just tends to have a presence somewhere else in the supply chain. In the first case, we might presume that the commercial rationale for the purely vertical merger is economically benign and pro-competitive, but it is not obvious that the commercial rationale for the horizontal merger that has a vertical effect is. Our guidelines currently have the presumptively pro-competitive or benign flavour about them. One of the questions that we have here is whether that would necessarily be the case for horizontal mergers with vertical effects to them.

CHAIR: Which brings me onto the vertical effects of horizontal mergers which have come up a few times for the OFT. I do not know, Chris, if you want to describe what the issue is, and we can then hear people's reactions.

DR WALTERS: There are three mergers that the CC is currently examining, which are, essentially, horizontal mergers between firms at one level in the supply chain, but have subsidiaries at another level. The horizontal concern is that what the CC is looking at there may be compounded by possible vertical effects in the traditional foreclosure sense. I just wondered what the panel thought about the extent to which it could add on, if you like, a vertical effect to a horizontal unilateral effect and whether, presumptively, that vertical effect should be benign in the same sense that it would be in a purely vertical merger.

DR WILLIAMS: Presumably, you could do a calculation of whether or not vertical foreclosure is possible, an arithmetic calculation. And the answer to that might well depend on the market shares of the firms. Well, I would imagine that it would depend on that. Such that the answer is that, at one low level of market share, foreclosure is not possible, but, at the higher level, it would be and, if this merger takes you from this low level to that high level, then the concern would start to arise. At a theoretical level, it seems to me that this is not something that you can rule out as a concern.

DR PADILLA: Can I make a cynical comment about this? Sometimes, in my experience, I have seen the vertical effects of horizontal mergers being what I thought was unreasonably overemphasised and I could only find one explanation, which is that the authority did not want to allow a merger with conditions, it wanted to block it. It was a way to kill the horizontal merger that they did not like, instead of imposing divestitures. Vertical issues are sometimes very difficult to resolve.

PROFESSOR SLADE: It seems to me that that may be true, but the efficiency aspects are probably muted, if it is a horizontal merger, but that is also true for foreclosure. If it is a horizontal merger, it is probably the horizontal market that is driving the merger and the foreclosure is less of a primary motive.

CHAIR: We just had a case at the OFT which raised the issue of how strong the relationship was between an independent buyer and its upstream supplier. The merger was an upstream merger between the two suppliers in a market, where they supplied two independent downstream players. We found an SLC on the horizontal basis, but used our discretion not to refer the merger on de minimis grounds, due to the fact that the main downstream player was determined that there was no SLC in respect of supplying it. It considered that it had enough buyer power and could bring in other players upstream if needed to. However, the more interesting question (which we did not end up writing up because we felt it was too speculative) was whether the main downstream player was such a big buyer for its upstream supplier would likely to be persuaded by the downstream rival and drive the downstream rival out of business. Even though there was no vertical integration, we were concerned that the big buyer could still have that sort of power over the merged firm. I think that it is quite a nice example of the vertical effect of a horizontal merger. I do not know even if there is much literature on that relationship.

PROFESSOR SUSLOW: I would just echo your remark. One might worry about whether there are potential co-ordinated effects from the horizontal merger where the vertical effects would allow the firms to raise their control of barriers to entry in, a critical input. One needs to think about strategic barriers to entry and whether having more complete control of suppliers allows them to make further entry very difficult. And that certainly happens.

PROFESSOR WHINSTON: I think to the extent that, in vertical foreclosure theories, one of the key driving forces is whether there is at one stage or another, maybe not either a complete or partial bottleneck, but somebody has an advantage, and a horizontal merger can create that. If you want to talk about efficiency offences, it might create even more if the horizontal merger is leading to a significant advantage for the merged firm. I think, in principle, they are there. I am not sure what I would do about them. I think that clearly the horizontal concentration does have an effect on the incentives and the ability to vertically foreclose or cap.

CHAIR: Do we think that it is something that should be put into guidelines or ...

PROFESSOR KUHN: I think no. If I would turn Mike's statement into something that would be a guidelines rule, it would say something like, suppose the horizontal merger creates a vertical bottleneck, then we are worried. I do not know the case, but I know your description of the case. For example, one of the first things that I would think about is that this is all driven by this one large downstream buyer. Why would this guy have more buyer power after the upstream merger to convince the upstream guys to foreclose?

CHAIR: Because the other upstream supplier was supplying the other downstream competitor.

PROFESSOR KUHN: Yes, but you could also say that, well, if you can supply the other guy, I am going to buy from you too. It is not as if the bargaining power of the large downstream firm is increased by the upstream merger. If I want to engineer this, why can't I engineer this with two upstream firms if I am so large for the market?

PROFESSOR WHINSTON: I guess that I am not following. Let us just take a simple model. Initially there are some downstream Cournot guys. There are three Bertrand guys upstream all with the same cost. There is no ability to foreclose to start with. Now, two of the three merge and have a cost reduction upstream. Now there is an incentive to foreclose. I want to be clear, given that there is a transcript being taken, there is a big distinction between saying that I can tell you a coherent story of this and saying that that is what the law should be and that is how it should be enforced, but there is some connection between the horizontal market structure and the likelihood of foreclosure.

PROFESSOR KUHN: I am just saying that I could tell a story as well where, even pre-merger - I mean, this firm was large downstream pre-merger.

PROFESSOR WHINSTON: Which firm?

PROFESSOR KUHN: The downstream firm where the worry was about that it might have an incentive to use the upstream firm and foreclose the other downstream rival. It is not obvious to me that in that constellation that is necessarily ... I think that I could write down a model and literally go the other way.

CHAIR: That is probably true.

PROFESSOR KUHN: I think that we can be very driven by an intuition that goes in one direction, but I think that we could also go in the other direction

just, basically, by saying that, well, whenever we are creating something that looks like a virtual bottleneck, then we are going to be worried about this.

PROFESSOR WHINSTON: I am not sure whether that is right.

MR JOHN DAVIES: It is just that, given that the OFT cleared it on de minimis grounds, we will, actually, have a rather good ex-post ...

CHAIR: Well, it was SLC but not referred.

MR JOHN DAVIES: Yes, it was allowed.

DR WILLIAMS: There is a tiny little experiment where we can see if the market power emerges.

CHAIR: I think that when you look at this experiment you may well see just that, but lets see what happens. It is still potentially under appeal so I am not going to say any more for another couple of days. Hopefully, by the time that the transcript comes out, it will not be ...

PROFESSOR JULLIEN: To get to that effect, first you need to have an horizontal effect that would be sufficient to raise serious concern.

PROFESSOR WHINSTON: Yes, but the merger that I just gave you ...

PROFESSOR JULLIEN: So it is just an added effect that you would have, but it is not something that would be in the premise of the cases.

CHAIR: In this case that was definitely true and there was a horizontal effect, which is why we found an SLC. The reason that it was de minimis, though, is that this customer outside the UK was actually in Ireland, so we could not care about prices to him absent any impact on downstream competition to UK customers. It was a legal jurisdictional question, but then it led to, if we could have shown a non-horizontal effect, we could have had the jurisdiction but we did not have the jurisdiction otherwise.

PROFESSOR WHINSTON: Actually, the merger I was describing was, actually, a wonderful thing just horizontally. You started with Bertrand Industry upstream and then you had big cost efficiencies for the two merging firms.

CHAIR: So you might let it through.

PROFESSOR WHINSTON: Just on the horizontal basis, it was a great merger.

DR MAZZAROTTO: I think that, there might be a larger class of mergers where it is the case that you do, actually, find an increase in market power brought about by the horizontal nature of the merger. That is an issue that sometimes we face: how precisely do we want to establish the type

of strategy that the firms will choose to employ in order to exploit that increased market power. They could just simply raise their prices in the intermediate market as a result of the horizontal effect of the merger, or they may choose to go further in taking into account the effects in the downstream market and follow some form of foreclosure strategy. It may be that, by default, we tend to focus on the horizontal nature of the merger, because that is simpler and that should take you there in terms of establishing the likelihood of customer detriment. However it is possible, for example for remedies purposes that one needs to get into that level of detail. At that point I am not sure exactly what we do.

CHAIR: The reason that we have run over is partly bad chairmanship, but partly because I was given a note to say that we could run on until quarter to one, lunch wise.

I think that there are things that we have not covered. What I wanted to do just before closing is run through them and let people highlight if there are any particular ones that they would really like to cover in the remaining few minutes. One which people might like to discuss is this point that Peter raised about whether we should have a kind of companion piece looking at what we have actually done in cases. Are there too few cases - and those that do exist, too esoteric - to do this in. Is this not worth doing if we are not sure we are 'state of the art' in our own analysis?

We have also not discussed the whole portfolio effect story, which was pretty crucial in AOL/Time Warner, although that was cleared. This is where customers particularly want a one-stop shop that can provide everything and can provide a full variety. How does this offset the analysis and, for example, might the 30 per cent screen be appropriated in that situation. They are probably the two main issues that we have not covered. Would anyone like to say anything on either of those in the very short space of time left?

DR PADILLA: May I actually say something about something else?

CHAIR: Yes, please do.

DR PADILLA: We have mentioned several times that, in the context of vertical mergers, efficiencies are very important and have an influence on the policy stance, etc. But I want to mention something about my experience in dealing with efficiency arguments in actual cases, which is relevant. As you know, in the European context, when you argue certain efficiencies, you have the pass-through discussion, but you also have the discussion

about indispensability, which ends up being quite important in the context of vertical mergers and raises a number of issues. For example, you argue that this vertical merger is going to give rise to significant double marginalisation efficiencies. Suddenly somebody raises their hand, on the other side of the table and says that, well, the vertical merger is not indispensable to achieve those efficiencies, because you could do a contract with, for example, a two-part tariff. In general, that is the kind of discussion that you have. You argue that, OK, but this vertical merger is going to make possible these new product interactions. And then you are told: "OK, you can do that through some contractual arrangement, joint venture, etc. So the discussion about indispensability becomes a bit frustrating, because you have all these theoretical alternatives - perhaps in some cases more than theoretical - which end up diluting all your efficiency arguments one by one and, in the end, you say that, oh, the guidelines mention the importance of efficiencies, but, actually, in practice, all of them have been ruled out on the basis of these indispensability arguments coming either from enlightened case team members, people who have read about contract theory, or coming from enlightened consultants working for the complainants, and all complainants then argue, for example, that these new product innovations are going to be trivial and could be achieved without the vertical merger, as proved by their inability to do so over the last few years.

DR WILLIAMS: The puzzle for my mind is, what is the answer to that? Two-part tariffs are not that difficult to impose. Therefore, I think that what one would need in order to show the merger specificity of the efficiency is coherent reasons why two-part tariffs are not available pre-merger. That is not always well explained.

CHAIR: Is the fact that they have not been used for the last 20 years, which is something that Jorge alluded to, relevant evidence? They could do this but they never have, so why ...

DR WILLIAMS: I could think of one case where they had never really thought of it before until two-part tariffs had been explained to them in the key notes.

CHAIR: This is the competition authorities as management consultants.

MR JOHN DAVIES: Thinking about the discussion that we had before about the distinction between the SLC stage and thinking about efficiencies and customer benefits, is merger specificity appropriate when thinking about

these effects to do with externalities, which will have a principal effect on the price? I can see, when you are talking about cost savings that we look at merger specificity. If we do the assessment of complementarities at the SLC stage, maybe we should still have a specificity element because it is part of the competition test against the counterfactual.

PROFESSOR STEPHEN DAVIES: Amelia, this does attach on something that has been nagging me right through this morning. We have really not talked an awful lot about the counterfactuals, the sort of counterfactuals that the Commission should be obliged to do. One such counterfactual might be, were the merger blocked, could the efficiency gains be achieved by green-field entry? It seems to me to be a worthwhile sort of experiment. I do not know how far the Commission is obliged to do that sort of experiment, but it seems to me to be worthwhile.

PROFESSOR KUHN: Just coming back to your question about how we deal with the specificity and so on, I think that we are doing something on verticals here which were never required in horizontals. With horizontals we said that, well, prices go up a little bit, but there are going to be some efficiencies on average that are enough. Only if prices go up enough, are we going to look for specific efficiencies of that merger. I am just wondering in verticals we should not have - well, we do not see through all the structure that might lead you to want to have a price that exceeds your marginal cost. Because, yes, in your perfect model that almost works: you bring in a little bit of asymmetric information, you still want to get a margin. Right, we do not know how much that is. But should we not do something like in horizontals, where we say that the expectation is that there is some benefit of double marginalisation in one way or another, that at least is what we are expecting on average, and we should be working on that basis unless we can find very significant anti-competitive effects and then one would see something that is a large efficiency. Somehow that makes more sense to me than in every kind of merger trying to find out how big is the double marginalisation effect. Am I interpreting your work wrongly, Margaret, that you define double marginalisation effects from your vertical studies?

PROFESSOR SLADE: Do I define it?

PROFESSOR KUHN: You do find the effect that there is double marginalisation.

PROFESSOR SLADE: Yes.

PROFESSOR KUHN: So, on average, you think that it is around.

PROFESSOR SLADE: Yes.

PROFESSOR KUHN: So why do we not work on that default instead of trying to prove in every case how big it is? Somehow in terms of practice that makes more sense. Otherwise, like for verticals, although we think that they are more likely to be good, we are actually reversing the burden of proof relative to horizontal mergers and that does not make any sense.

PROFESSOR SLADE: Let me just say something about what Steve said. It is also true that most of the inefficiencies come through contracting. What you are saying is that you could do this bad thing or good thing some other way. Why don't you try this other way?

PROFESSOR STEPHEN DAVIES: It would be a logical extension of the argument that, well, the other firms can do the same thing, too, they can integrate forward, which is a standard argument in favour.

CHAIR: I am sorry, Steve, I am going to have to stop the discussion. I am not going to try to summarise everything that we have gone through because I think that it has been very wide ranging and all incredibly useful. Now, we have got to try to figure out how we put it into the guidance, which is no easy task. Nevertheless, it has been very, very interesting. I think that one of the main points that have come out, for me at least, has been the importance of the empirical evidence and the need for more empirical evidence. That is at Margaret's door. Then thinking about how to utilise and employ that empirical evidence in thinking about policy. I think that there has been a very strong agreement amongst everybody about the importance of a coherent story of harm when one is doing these cases.

There has been a general agreement that we have no idea where 30 per cent came from, but it seems broadly sensible.

There is general agreement, although wavering, that we should not accept efficiency offence arguments.

There has been general agreement that we should look at pricing efficiencies at the SLC stage rather than at the customer benefits stage, which may distinguish it from cost benefits.

There is a general view that we should not try to think forward on merger waves because it all just gets too speculative, even though we may have a strong prior that there is about to be a merger wave occur.

There is general agreement, apart from that, that it is just very, very difficult to look at innovation. And in fact, that assessment of non-horizontal effects is just very difficult full stop.

Thank you very much to everybody in the audience and, in particular, to

the people on the panel, and also to Chris for putting together the questions. I think that it has been a very good debate and I look forward to this afternoon.

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