

**COMPETITION COMMISSION
GROCERIES MARKET ROUND TABLE MEETING
AMENDED**

Notes of a round table meeting
held at Victoria House, Southampton Row, London WC1B 4AD
on Monday 9th October 2006

PRESENT:

FOR THE COMMISSION

Mr Peter Freeman - Chairman
Ms Barbara Donoghue
Professor Alan Gregory
Professor Alan Hamlin
Professor Bruce Lyons

FOR THE STAFF

Dr Benoit Durand - Director of Economic
Analysis
Mr John Davies - Chief Economist
Mr John Kirkpatrick - Inquiry Director
Ms Kate Collyer
Ms Kirsten Edwards
DR Kimya Kamshad

INVITED GUESTS

Dr Peter Davis
Professor Margaret Slade
Professor Ronald Cotteril
Howard Smith
Professor Ian Clarke

DR DURAND: Good afternoon everyone. Can you hear me? I am Benoit Durand, Director Of Economic Analysis and a member of the staff working on the Groceries Inquiry. This is the first of two round tables that the Competition Commission is organising on topics that are relevant to our groceries inquiry. The round table will consider today the local competition aspect of the inquiry and tomorrow we will have another round table that will consider the buyer power and supply chain. That round table will be chaired by John Davies who is sitting in front of me who is actually the Chief Economist of the Competition Commission. On behalf of the Competition Commission I would like to welcome Professor Slade, Professors Smith, Clarke, and Davis. Professor Cotterill is actually missing right now but we hope he will be joining us soon. We have sent a mission to rescue him from wherever he is but we know he is in London.

Shortly I will ask each of you to introduce yourself, but before we do that I would like briefly to introduce today the round table and provide a number of housekeeping formalities to attend to. First, the purpose of this round table is to encourage discussion among economists who have researched and published work on topics that are relevant to the Competition Commission's investigation of the UK groceries industry. The Competition Commission's intention, I repeat, is to ensure that all strands of economic argument that are relevant to this investigation are fully explored. As you may know the Competition

Commission has published an issues statement on its website but has not yet reached any decision on any of the issues that we will be discussing today. The inquiry group will consider the outcome of today's discussions alongside other evidence presented to it in the course of the inquiry so this exercise really compliments our evidence gathering. As you can see we are taking a transcript of today's discussion and we intend to publish that transcript on our website. A draft copy will be distributed to you and you will be able to correct the transcript if there are any errors. I encourage you to actually make those corrections on the draft. I do not anticipate that there will be any discussion on sensitive matters today. However, if there is any information that you consider should not be published we will consider such request. Finally, if you want to submit additional documents after this discussion today you are welcome to do so. I anticipate that we might publish any such additional material along with the discussion paper that we had sent to prepare this round table.

We have divided that round table on local competition into four topics that we will consider in turn. Kate, who is sitting next to me, who is a staff economist on the inquiry, will introduce briefly each topic. Then after her introduction each academic will make a short presentation on each topic, about ten minutes. Following the presentation of each of the panelists, I will invite

everybody sitting around this table to basically react to your presentation, disagree with the presentation if need so, or provide just remarks on the topic. We have allocated about 25 minutes for the discussion on each topic. Then, at 3:30, we will break for ten minutes for coffee and then we will come back here. I have mentioned already the academic panelists who are sitting around. I will add one thing, that Peter Davis who is here sitting with us is the Deputy Chairman of the Competition Commission. He is not a member of the inquiry but as you may know we invited him because he has written on the topic today and we thought his contribution would be valuable to this round table. I will also add that Alan Hamlin and Bruce Lyons who are also sitting round this table are members of this group and are taking evidence. Also participating today are members of the Groceries Inquiry group members and some of the staff who are sitting in front of us. I will mention Peter Freeman who is the Chairman of the Competition Commission and will Chair this inquiry. Jayne Almond is not here, I believe, but Barbara Donoghue and Alan Gregory are here sitting with us. In addition we have, as observer status, Dr Stanley Wong who is a member and director of the competition authority in Ireland so we are delighted to have you here.

For the record, I would ask each person sitting around this table to introduce themselves and please describe the work or research that you have conducted that is relevant

to this investigation. I would also ask you to disclose whether you have advised in the past or whether you are currently advising UK grocery retailers or their suppliers. We have received full disclosure from each of you about those potential material conflicts but I would like you to indicate any relevant link and produced work for the transcript. That would be very helpful. We will start with Bruce who is on the end of the table.

PROFESSOR LYONS: I presume I am on this side of the table because I am an active economist and Deputy Director of The Centre for Competition Policy; but I am here as a member of the group investigating the groceries market. I have not published on the retail industry. No conflicts.

PROFESSOR DAVIS: Peter Davis, the Deputy Chairman of the Competition Commission here in the role of a now ex-academic who has published in the area of the analysis of demand in differentiated products marks generally and in the analysis of geographic and spatial differentiation; in particular demand in geographically differentiated markets.

I also have some work looking at price concentration analysis and other work looking at the analysis of entry gains which I think are one area which we will look at later on. I should also say that I do have one conflict which I shall bring to the panel's attention, which is that I did some work for one of the major supermarket chains during the Safeway inquiry a few years ago through one of the main economic consultant firms.

PROFESSOR SLADE: I am Margaret Slade at the University of Warwick. I have not studied supermarkets per se but I have used empirical techniques to look at market power, market definition. I have used scanner data from grocery stores as well but looking at the products rather than the chains.

I have no conflicts of interest.

PROFESSOR COTTERILL: My name is Ronald Cotterill and I am a Professor of Agricultural Economics and Economics at the University of Connecticut and Director of the Food Marketing Policy Centre there. Over the past 25 years I have focused on analysis of food industries, especially food retailing, looking not only at concentration and price relationships but also testing for incontestible markets and entry barriers in food retailing. I have worked with scanner data, a number of studies, and have facilitated the use of scanner data by others including Naveath Navoe who was one of the pioneers on differentiated product, discreet choice, demand modelling. We have also done that kind of work at the University of Connecticut. I have never worked for a British supermarket chain. I have worked for some in the United States both for and against in probably a half dozen different merger and monopolisation cases.

MS COLLYER: I am Kate Collyer, Staff Economist at the Competition Commission. I am advising on this inquiry.

MR KIRKPATRICK: I am John Kirkpatrick. I am the Inquiry Director. I lead the staff team supporting the inquiry group supporting on this inquiry here at the Competition

Commission.

MR BECKERT: I am Walter Beckert. I am an Academic Econometrician at the Birkbeck College and the Institute for Fiscal Studies. I am here in my role as Economic Advisor to the inquiry. In my research I worked and still work on demand analysis, but not at the moment, in the area of differentiated products. However, there is one ongoing research project which is actually carried out with another Competition Commission economist, Nicola Mazzarotto, which has as its topic what one would call price concentration analysis but it is a methodological contribution with an application that falls into not the grocery industry, but cinemas.

PROFESSOR HAMLIN: I am Alan Hamlin. I am a member of the Competition Commission and on the panel for this inquiry. I am an academic. I have held chairs in both economics and currently in political theory, but I have never worked on retail. I have no conflicts.

PROFESSOR CLARKE: I am Ian Clarke from Lancaster University Management Schools. I am not an economist, probably one of the few people in the room that are not. My background originally is in Human Geography and I am the Chair in Marketing at Lancaster University Management School. In a prior life I worked for seven years with Tesco involved in store development, spatial analysis, forecasting for their store development process, and advised the board of the Company there. I do not have any conflicts of interest. I

have consulted for different multiples at different times but not in the grocery retail sector or in the supply part of that, and certainly not in the last six years either. My areas of interest are to do with how local choice is experienced by consumers. I think that is probably why I have been invited to this particular discussion. I have done some research funded by ESRC up until 2004, which looked at the relationship between retail provision and consumer choice using cross-sectional analysis and ethnographic work, so quite different to many of you in the room. I am following that research up at the moment with some ESRC funded work looking at how retail concentration influences perceived choices, particularly in terms of what consumers think of the assortment of stores in a given locality and satisfaction with that. As a reference point to that we are using the Competition Commission's assumptions about perfect choice as a baseline to judge what people are saying out in the field. That is me.

MR SMITH: I am Howard Smith. I am not actually a professor although you have kindly promoted me today. I have worked on Supermarket Choice. I have done a number of studies that have been published in the academic literature. I have also worked previously for the Competition Commission in the 2000 inquiry in which I worked on the local choice and competition study which involved the estimation of a demand system. My work usually involves the estimation of differentiated product systems applied to the supermarket

industry. I do not have any conflicts of interest although I am currently working on a research product which is financed by the Milk Development Council on the supermarket supply chain; but that is an independent piece of academic work and should not present a conflict.

DR DURAND: Thank you. Now I will hand over to Kate who will briefly describe each topic that we will be discussing today.

MS COLLYER: Thank you. I am going to give a brief introduction to the four issues for discussion at today's Economists Round Table On Local Competition. In the local competition part of this inquiry the Competition Commission is assessing the effectiveness of competition in grocery retailing in the UK and also the factors that influenced its effectiveness. As part of its analysis the Competition Commission will be defining the relevant product and geographic markets in order to assess the extent of competitive constraints that exist between different retailer and in possibly different locations. In practice, in recent UK merger decisions the Competition Commission has delineated grocery retailing according to store size, typically classifying stores into three categories: 'One-stop' shops, mid stores, and convenience stores. However, grocery stores differ from one another in multiple dimensions. In addition to store size and format, stores can be distinguished by their fascia and characteristics such as the availability of car parking, as well as the

offer to the consumer which the Competition Commission has previously characterised as a combination of price, quality, range and service. Turning to the geographic side of things, the Competition Commission has previously considered that grocery retailing markets are local and defined by a 10 to 15 minute drive time for larger stores.

Certainly in grocery shopping consumers bear transport costs which tends to make markets local. On the other hand local areas are often contiguous and many multiple grocery retailers set prices nationally which might suggest wider geographic markets. However, even with national pricing it is possible that grocery retailers may vary the value offered to consumers at a store according to the demographic and competitive conditions of the local area for example by changing the product range, a store format or by offering instore promotions or vouchers. Against this background the Competition Commission will have to delineate clear boundaries for the relevant product and geographic market. The panelists may wish to discuss the various ways in which they think consumer level or store level data or any other type of data can be used to delineate the relevant market.

The next issue for discussion is the relationship between market power and market structure in grocery retailing in the UK. The Competition Commission's issues statement sets out of a number of concerns regarding to competition in grocery retailing in the UK, including

whether any aspect of the structure of any local or national market or any aspect of the conduct of grocery retailers or consumers distorts competition. Specifically the Competition Commission is considering whether any feature of the structure of grocery retailing in the UK, such as greater concentration or increased ownership of convenience stores by large national multiple retailers is having a negative effect on consumers welfare in the forms of either higher price, restricted choice or lower product quality. Therefore, the Competition Commission will consider whether higher concentration measures in the local and national markets reflects the ability of grocers to exercise greater market power that will translate into higher prices and/or lower product quality or less choice whilst recognising that competitive intensity may vary in multiple dimensions as well as by location and second, that competition may be on nonprice strategic variables. The panelists may wish to offer their views on these issues. In particular, the Competition Commission is considering how changes in the concentration level over time and across different local areas has impacted prices, the quality of products on offer and choice. The panelists may wish to offer their views on how the relationship between market power and market structure can be modelled while taking into account vertical and horizontal product differentiation as well as nonprice competition.

The third issue for discussion today is closely

related to the previous one and considers the identification of barriers to entry. One of the key areas that was raised in the OFT's reference is that barriers to entry in local markets may give rise to a lack of effective competition in some local areas. As part of this enquiry the Competition Commission is considering the significance of land and of planning and zoning regulations to competition in grocery retailing. In particular, the Competition Commission will consider the extent to which the planning system creates barriers to entry, how these regulations limit the number of large superstores on the outskirts of town and the impact that such regulation may have on local market structure and the ability of incumbents to exercise market power. In addition the Competition Commission is considering whether the conduct of any grocery retailers, including the acquisition, disposal or development or use of land may distort competition. Finally, we are also considering the extent to which there may be other barriers to entry outside of the land and planning regime which may affect competition with particular consideration for economies of scale and scope. The panelists may wish to offer their views on these issues and, in particular, on how barriers to entry, local or national, can be identified not and how the impact of the planning regime can be established.

The final issue for discussion at today's economist's round table is that of pricing practices. In its reference

to the Competition Commission the OFT raised concerns that large grocery retailers may use certain pricing practices in order to force out smaller retailers. Specifically the Competition Commission is considering whether, as some commentators have suggested, the larger retailers selling a wide range of products sell some products below cost in order to distort consumers perceptions of value for money, thus unfairly damaging smaller retailers whose more limited product ranges might restrict their ability to cross-subsidise between products to the same degree. A related concern is that larger retailers may set lower prices where competition is strong the purpose of which, it is argued, is to force smaller rivals to exit. Ultimately larger retailers will raise prices or in any way change the value offer to consumers in order to increase profits. Whilst it is not clear that below cost selling and the practice by a multiproduct retailer of applying different margins for different products is necessarily harmful to consumers and although low prices could be indicative of strong local competition and are generally associated with higher consumer welfare, it cannot be excluded that in some local areas a grocery retailer may set low prices with the aim of forcing a rival out of the market or preventing a potential rival from entering the market. In this case low prices would benefit consumers only in the short term and once the rival has exited the local market the large retailer may increase its prices which may lead to consumer

harm. In the final issue for discussion today the panelists may wish to offer their views on how the exit of smaller retailers that is the relate of legitimate competition can be distinguished from exit that is that is due to exclusionary practices of larger retailers.

DR DURAND: Thank you Kate. Today, the Competition Commission is very much in listening mode. What we will try to do is to have a fruitful discussion between the different people sitting around this table. We have decided that for each topic we will ask one of the economic panelists to actually kick off the discussion with a short presentation of ten minutes so for the first topic on market definition we have decided, I think rightly, that Howard Smith should start since he has got quite a lot of experience in market definition in the grocery sector.

MR SMITH: Thank you very much. I am going to begin by talking a bit in generalities on market definition in the supermarket industry. Then I will talk a bit about what kinds of empirical -- what types of data and I might respond also to some of the discussion points in the document. In the first part I am going to just talk about market definition at conceptual level. I think in the supermarket industry it is important to really understand consumer shopping patterns and understand a bit about -- get down to the level of the individual consumer and see what they actually do. It is very helpful and informative to look at microconsumer studies like the sort of data that

TNS and AC Nielsen provide you with. These companies in fact have panel's of consumers who register all their choices. This information will tell you where people go for their shopping, how much they spend in those places, on what they days. They tell you lots, everything really that you need to know about consumers' shopping patterns. When you look at this data -- I have actually been looking at that data recently. I am doing a study on shopping behaviour, a new study, which uses this kind of data -- you find that the Competition Commission's previous focus on division between primary and secondary shopping is quite a sensible division because what you see is a very wide range of things being done by consumers in it is of the number of shops they go to and so on. What seems to be constant amongst consumers going to supermarkets is that they do have a primary shopping trip and then a number of other trips. The idea of having a main shop is a pretty common feature amongst shoppers and it is the majority of spending. If you actually look at this data I have actually got the figure of 76 per cent so this is -- if you look at the average across consumers of the share of their main shopping in overall shopping in two week period, it is 76 per cent. That is a concentration ratio of their main shopping divided by their overall shopping expenditure, so 76 per cent is primary shopping as the Competition Commission defined it last time. The primary shop is something that most consumers do. You look at this

76 per cent, it does vary a bit. Some people are pure 'one-stop' shoppers but 75 per cent of people -- sorry, the lower quartile of this concentration ratio is 67 per cent of shopping is in the primary shopping trip. This primary shopping does seem to be a feature that just jumps out at you from the data. It is very robust.

One of the things I am trying to do in my current work is to work out whether the amount spent on the primary shopping trip is sensitive to the choice sets that consumers face, so if you have got lot of stores around you do you still do most of your shopping in one big trip. It varies a bit. You do get some kind of effect but really if that is a very robust thing. These consumers do prefer to do one great big shopping trip. It does not vary a lot when you change the choice set that consumers face. I think primary shopping is a very important type of shopping and it is really did -- I think it was justified for the Competition Commission to focus on that. What I then did in the 2000 inquiry was to do a model of consumer choice for primary shopping and another one separately for secondary shopping and I estimated a utility function. The utility function, let us focus on primary shopping. I put in to the utility function the things that the Competition Commission had mentioned. Conceptually, people care about the range of products on offer, the distance to the store, the quality of the products and the price. These are the four things they cared about. In an empirical study you

have to use observables, so for the range which is quite a different thing to observe, I just used store size because store size clearly allows the firm to offer a wider range.

For quality, I used a firm dummy, a firm effect. The assumption was that you estimate a parameter for each firm and that gives you information on the quality the consumer perceives as being associated with that firm. What is clearly the case was that consumers care about all of these things, they are all significant. When you do these choice models it is very clear that store size is extremely important in driving primary shopping and, that is interpreted because people care about the range on offer. It is also clear that quality differences matter and that location matters. The Competition Commission last time really defined the market by the size of store and the geographic market. I think that was right. These two features just vary a lot among the stores. Obviously stores vary a lot in their location but they do vary a lot in their size so these are two very obvious ways to define the market. Then the question is should you also include things like store format or the quality offer. I think that in terms of the quality offering it does not make that much sense to start segmenting by quality with -- quality amongst at least the big supermarket does not vary a great deal so I think they all seem to be reasonably substitutable in the quality variable. In terms of whether store format should be used, you mentioned this in your

paper whether we should start defining market by format. I think by that mean you things like Tesco Metro as opposed to Tesco Extra and so on. It seems to me once you have considered store size and firm and location then there is not that much extra in these formats. The formats really are shorthand for the other variables and I have mentioned and so it is not clear you should be focusing too much on formats. It is not obviously that consumers actually care about these brandings, whether it is Tesco Metro or Tesco Extra.

Now I turn to type of data and what kind of empirical work you might do. There is basically two kinds of data you might have. The Competition Commission will probably have already data at the store level giving you number of consumers and expenditure and so on. This is OK but it is not ideal. It does not, for example, allow you to know how far consumers have gone to the store, where they have come from, whether they are on a primary trip and so on and so forth. It is much better, I think, to have this microdata which allows you to work out, for example, what store size thresholds are appropriate. The previous store size thresholds of £1400 square metres for example you can actually go and look at this microconsumer level data and see if the 'one-stop' shoppers do in fact stop visiting stores when they are below that size, so in ways like this the micro data is very useful.

You mentioned one or two points to discuss in your

document so I will just come on to them. You asked whether national price, the practice of national pricing that means that -- it could mean one of two things you say. It could mean that a national market, in other words the geographic market is national, or it could mean that there are menu costs store wise. I think it probably means neither of these things. I do not believe there are menu costs store wise because you can actually set costs for, say, three or four different types of store so it does not require you to set different prices for every single store. Similarly I do not believe there is a national geographic market. It just seems fairly implausible to think this is the case. Some work that I published actually shows there are incentives to change prices locally. I think that is the case. Then the question is why do the supermarkets do this national pricing? Of course, they were told off for doing regional variations in the last Competition Commission inquiry so they are just following your advice I think.

Just another couple of points on types of demand estimation you can do. If you wish to estimate a demand system I think it is probably quite a useful thing to do. There are various methods that have been used by people round the table. I like demand estimation where you have consumer level data. I think in this setting it is very useful to have consumer level data and then you can do a choice of store and you just set the choice set to be so many stores in the locality of the consumer. You can also

do things at the level of the store rather than level of the consumer and that is the sort of work that Peter and Margaret have published. I am not the sort of person who says you have to use one method or any particular application. You could use those methods too and I think they would be fine but I think the problem with them is they would not contain the information on, say, the level of the consumer, things like the type of shopping patterns people are doing. It would not give you information on how four people -- direct information on how far people have gone to the store and I think that may prove to be valuable information to have. I have used up my ten minutes have I not, more or less?

DR DURAND: Pretty much, yes.

MR SMITH: I will just stop there and I might come in later.

DR DURAND: You can have for some later comments. I will ask if maybe someone wants to react to this. I understand that Peter or Margaret have different ways of estimating demand system so they may want to also chip in.

PROFESSOR SLADE: I have not looked at the level of the store. What I have looked at is brands within stores and using data that came from the consumer but aggregating up to the brand. You would look at all neighbourhoods in the UK and to every consumer or...

MR SMITH: You would not have to look at everyone. I think I would favour a method where you estimate consumer level model. You do not have to look at all neighbourhoods but

you just look at the neighbourhoods that -- the TNS and AC Nielsen type data gives you over 8000 consumers. You can just estimate a choice model for those consumers. That would leave out some parts of the UK or you could even do a subset of the...

PROFESSOR DAVIS: I think it is certainly true that one of the difficulties with individual level data is that you end up having a relatively small number of consumers living close in your sample. Even if have got 50,000 people living cross the UK you can end up with a relatively small number of people living close to the set of stores that you want to study within any particular market. In general I am not averse at all to using individual level data. My sense is that individual and aggregate data tend to compliment each other rather than be substitutes. There is one issue which plays out in both arenas which is important, which is the fact that prices generally do not vary across consumers. Having ten consumers who face the same prices may not be very informative about the ways in which consumers respond to changes in prices. There is a difficulty for understanding price elasticities using consumer level data. In this context, because prices vary only in a limited way across shops as well even if you have aggregate level of the shop level you may have nonetheless difficulty in isolating the price elasticities. My preferred data set I think for things like market definition would involve panel data, whether it be

individual level or at the consumer -- or at the aggregate level. I think the kinds of experiments that have become very useful for understanding market definition are perhaps entry events. Using entry events you can learn about whose revenues go down and whose revenues go up, and in a very direct way, observe where the substitution is happening from and to. You can see that in the consumer level data as you see where consumers shopped before a new supermarket opens and afterwards. You can also see it in the aggregate data as you see sales at some of the shops will go down following entry and at the new shop obviously you are seeing new revenues. Usually you can track to see where those revenues are coming from. That is the key piece of evidence that I would see as being very useful in market definition both in geographic terms because, presumably, only the local supermarkets are affected by the entry of the new shop but also in format terms because you will see whether the convenience stores are affected or not, and that will be useful for product market definition as well as geographic market definition.

PROFESSOR SLADE: One of the things I find really puzzling about this is this national pricing. I certainly agree with Peter that if, in fact, there is no price variation conceptually it is going to be quite hard without panel data to identify any type of effect. I am not sure that I believe it but if I saw data and saw it as uniform across neighbourhoods and regions and so forth I would then have

to go with something quite different from the consumer level.

MR SMITH: Of course the consumer panel would be a panel so you would observe price variation over time.

PROFESSOR SLADE: You are talking about -- because your study was a cross...

MR SMITH: My earlier study was across the section, but there is different data now that is available...

PROFESSOR SLADE: OK.

MR SMITH: That tracks consumers over a number of years. I agree if it was a cross section you do have problems particularly if you put a firm dummy in and you do not have any variation within that firm. If you have a panel you should be able to identify that.

PROFESSOR COTTERILL: I find this all fascinating. I have a different perspective than some that have been presented here. I do not think that consumer based data sets are necessarily the most efficient way to get at market definition. I would argue for store data sets. We are in an area of industrial organisation where we are looking for competition between different stores and so I would take as a point of reference the store. At least in the United States that is the way we have done it. We have not had these rich data sets that Dr Smith over here has used so nicely in the UK. These massive data sets which we could not begin to dream of analysing until perhaps five or ten years ago because we simply did not have the data and we

did not have the computing power to do these kinds of studies. I may be a bit outdated but I will my hat on the industrial organisation of the older generation where we look at the Marchelian market with firms in that market. We define the market areas by looking primarily at the draws that supermarkets take from the surrounding area. Store level spotting charts have been used very effectively in the United States. You can get those from the companies themselves. They study where their customers come from and that kind of research has the additional merit that is not done by a professor. The fact of the matter is it is done by the involved parties. They have the drive to maximise profits so you would think that they would be looking very sharply at where they were competition comes from.

One other two other points. Generally speaking, prices by themselves and price levels by themselves really say nothing about a market. Similarly market shares, '75 per cent of the people shop at a certain kind of store', really say nothing about a market. What you have to look for is what Professor Davis suggests which is the ability to switch. That a price varies and then people switch. He suggests entry as an event that will capture that nicely and I agree with him, and that is a wonderful one. I would suggest going further. I looked at the 2000 study this morning, that is a bit why I was late, I was stuck reading it. The fact is that is that your 2000 study found 15 to 30 per cent of the groceries sold in any particular large

supermarket multiple were sold on promotion. Promotions do not go in lock-step from one store to the next. If you look at a net of promotion price and if consumers are savvy and switch you should be able to pick up switching behaviour from that alone. I think that if I were looking at the data that Professor Smith has here I would be looking at hopefully some consumer switching behaviour in the AC Nielsen type data. I would certainly be looking for studies from supermarket chain that pick up on that as to who they really lose customers to or who they gained them from when they were doing a promotion. That, again, would go to market definition.

The last thing I will leave you with is the cellophane paradox from the United States, the Dupont case back in the 1950s. The idea of defining markets based upon price switching and demand situations really has to be careful. In the United States we look primarily at the notion that we are looking at that switching behaviour when the prices are at a competitive level. If the prices are not at a competitive level in the markets you are analysing -- for example they are already at the monopoly level. At the monopoly level you will have more substitutes, get the price so high people will substitute away from food to sports or whatever else. You need to be careful with regards to these kinds quantitative price tests as to whether, in fact, you are not picking up more substitutes because the prices are so high that people will substitute.

For example, away from the primary shopping to a convenience store. If the price in a primary supermarket is already as high as what is in the convenience store, sure people might be intending to switch there; whereas if they are at more competitive levels the convenience store would simply be ruled automatically, so self-made paradox.

DR DURAND: Thank you. Any other reaction? Professor Ian Clarke.

PROFESSOR CLARKE: I just wanted to make three related points that respond to those discussions. The first one is that I think coming at this from a very different disciplinary angle, I think the type of research that we have done in the past and others have done in the other social sciences suggest that this division between the two markets, whilst it is demonstrable in data terms, a 'one-stop' shop and the 'top-up' convenience shop, when you actually look at it from the perspective of, rather than either the store or the individual, if you look at it from the household's perspective, actually division blurs tremendously. Yes you can demonstrate proportional shopping between the two but actually when you look at things qualitatively in depth as we have done and as we have written about, what you see is an intimate relationship between those two shop types; so to argue and to assume that there are two markets I think, in those terms, is something of a false one. That introduces a difficulty in terms of estimation of the size of the

market. I think related to that, I think the markets are harder to define also because we see in that rich qualitative work the impacts of, of course, prices but of brands, of formats of stores, fitting into people's lifestyles and how they use these stores. All of those are crucial to consumer satisfaction. The last point I wanted to raise in response to thinking about demand is that I think judgment about local markets really under estimate the effects at the moment in terms of those. If we divide 'top-up' and main shop markets they underestimate the impact and the role of the diversity of provision. Then, more particularly in terms of demand estimation, if you look at it from the consumer's perspective as we have done, the spatial units used in the previous investigation in 2000 and so on suggest, when you look at how people use stores and the real choices that they actually have available and the level at which they make those choices, are actually much more constrained than the quantitative models that have been done in the past. We can look at a town, a given town that in the Competition Commission terms previously might have had 'perfect competition', or perfect provision - three supermarkets and some local stores. When you actually drill down to the level of the household which is the level that we have been doing research in particular neighbourhoods, and particular parts of those catchment areas, you see those choices being much more constrained, so I think there is an issue in terms of the spatial level

at which demand is being estimated.

MR DURAND: When you say constrained do you mean localisation of the household and the location of the stores, about a household travelling to different stores, just to clarify?

PROFESSOR CLARKE: I think what I am trying to get at is that we see households using main stores and 'top-up' shops in those terms very interchangeably, in very quite complex ways. That is one point, one aspect. The other point is that the choices that are experienced on the ground by households are much more constrained than simple concentration measure and HHI index would lead us to believe.

PROFESSOR LYONS: Can you just clarify what you mean by 'more constrained'?

PROFESSOR CLARKE: I think the assumption that, say, three supermarkets and some local stores within a given area is going to bring sufficient choice from the perspective of a household, from the perspective of a consumer is something of a false one because in many cases, in many households, those choices are not -- they may be aware of them but there are less available because of the constraints, working constraints, household constraints, domestic constraints and so on.

PROFESSOR SLADE: Would that not show up in the data? Why would the demand elasticities not reflect the problem? If people never switched then you would see no switching.

PROFESSOR CLARKE: I think people do switch...

PROFESSOR SLADE: No. I mean if their choices are constrained then you will see low elasticities. Is that a problem?

PROFESSOR CLARKE: I suppose you would.

PROFESSOR COTTERILL: I think this is the distinction between looking at the level of a particular variable and the sensitivity of it which to a change in price. That is what we are talking about here. You have done excellent research on how different people are constrained and different people make different choices. The economists on this side of the room have said, 'OK, but when price varies how do those people change?' That reflects on your work because if price changes, as Margaret says, and quantity does not change, then we are truly constrained and you have a very inelastic demand then. At a particular store that we are looking at, that store can raise its price and, in fact, people are not going to switch away from it because they are they are constrained, they can not switch. That is what is going on I think.

DR DURAND: Any other reaction?

PROFESSOR HAMLIN: This is not a reaction, it is an attempt to perhaps move it on slightly. Most of the discussion we have had so far on methods of most estimation and so on has focused on, if you like, estimating at a moment in time, particularly market definition, market structure or market concept. I just wondered if I could ask each of you to

comment on some of the changes that have been undergoing in the market since perhaps 2000, since the last Competition Commission's investigation because they potentially bear on this distinction between the one-stop shop and top-up shop or on the distinction based on store size. There are at least three, perhaps, sorts of changes that are perhaps noticeable in the market and I just wondered if each of you could comment on whether you think they are indeed relevant to the issue of market definition and how we might go about quantifying any relevance. The first one is change in, if you like, ownership patterns, the entry into the convenience store sector of some of the multiples. Is that cross ownership issue one which is going to affect our market definition position rather than our competition analysis within definition. The second one is what we believe to be or are told is a shift towards more frequent shopping by many consumers based on the greater prevalence in the market of shopping missions driven by fresh produce, chilled produce and other things which have low life expectancy, if you like, in the storeroom. Thirdly, the diversification we have observed in the shops, if you not like, the main shops, out of groceries, so that we are looking at greater cross market activity into anything from white goods to fuel. All of those three things have been trends since 2000. They started before 2000 but they have been continuing. To what extent might they affect our market definition question?

MR SMITH: Shall I begin with that. I thought you were going to mention the internet which is another trend.

PROFESSOR HAMLIN: I could have gone on.

MR SMITH: How does that affect our concept of the markets and does it, for example, change the store sizes that may be the relevant way in which we are limiting the market definition? I think the movement of Tesco into convenience stores for example or, indeed, a number of the multiples into the convenience sector, the movement itself does not seem to me to change the definition of the market as such. The products are still the same are they not and the consumers tastes are the same. What is happening is there is an ownership change. It is not clear that has actually changed the definition of the market as such. I would say that probably does not change our definition of the market. The move across market activity. That means, if I understand rightly, that Tesco are the big supermarkets selling electrical products and nonfood. Again, that seems the mean that essentially a number of different markets being serviced via the intermediary of a supermarket after that rather than -- so it does complicate things a bit but it means there are a number of markets now being serviced via the supermarket. It is not clear to me that the market for grocery shopping changes. It is just that people may pick up other products when they are visiting and doing their groceries. I think that does have an affect on the way in which -- it does clearly have an affect on the high

street but it moves us beyond the grocery market. It is not clear you can really start adding in everything that the supermarket sells to mean that the product that we are defining. As for more frequent shopping and the focus on fresh produce, I am not clear that makes a great deal of difference to the definition of the market. It is clearly still local and it is clear still that people care about product range so the fact they are doing it more frequently, it is not obvious what the effect of that is. It may have some effect on pricing incentives but I think they will be quite small. As for the internet there is some discussion of whether that changes the localness of the market and clearly I think it can do. People are no longer concerned about the location when they shop on the internet so that does remove one of the dimensions that consumers previously cared about, so the internet does have an effect on the definition of the market, removing the geographic aspect.

PROFESSOR COTTERILL: I will address two issues. One is the question of whether the convenience stores and the multiples are in the same market because, before I came I had a chance to look at what is on your website with regards to some of the farm organisations and some of the independent wholesalers who are vehemently protesting that, in fact, the market should include the convenience stores and that it has done great damage to them because you have not defined it that way. I think that both sides are

correct. The fact is that if you are defining the market from the standpoint of the consumer then indeed there are two separate markets, convenience and one-stop shopping. If you are defining the market from the standpoint of the farmer and the wholesalers you are looking at a different market. You are looking at the wholesale market. Their, indeed, those two players are one and the same. If it is Sainsbury or Tesco and they are buying for distribution for their one-stop shops and their convenience stores they are one buyer in that wholesale market. Therefore the farmers and the independent wholesalers are also correct. If you are looking at the standpoint of buyer power and monopsony power, you should indeed define the market as they want. That is my first point. My second point is the -- what was it? I have forgotten it. I will pass.

DR DURAND: I think on your first point hopefully this issue will be discussed tomorrow.

PROFESSOR SLADE: I think before one can look at market definition one really has to tackle this national pricing issue. I find it very, very puzzling. If you think about the old fashioned Time Series type of market definition, what people did was you tweak a price of one region and see whether the prices respond either instantly or with a lag in others. If that is not possible then it is very, very hard to decide what the market is going to be and it is very mysterious to me why -- this is a huge benefit that the firms are giving up to forgo regional pricing where

demand, cost conditions, everything varies as well as competitive conditions, why would they do it? It does not make sense to me that it was because of the Competition Commission's previous study or menu costs. Menu costs, if anything, have gone down, not up. It just seems like something that has to be tackled.

MR BECKERT: Can I just make a comment on this which actually I wanted to make already a little bit earlier. A lot of the discussion has focused so far on demand estimation but when we have to define the market, the demand side aspects have to be wedded to some notion of how firms compete. Maybe in the classical empirical differentiated product literature, the mode of competition was always price competition, so looking at your own work and the work following Barry Levinson-Hickers. It may well be that after the previous supermarket inquiry where supermarkets were more or less told to charge uniformed prices, the mode of competition -- for lack of a better word -- is maybe not just price competition, but price competition and something else. Do you have any thoughts of what that something else might be or what sort of competition model might be applicable in this context? Just to give you maybe some ideas in which way I am thinking, it may well be that by keeping price nationally the same but having different brands in each category, say different brands of beer, different brands of cereals and so on. By altering the range that you are off in different

stores you can effectively change the price that you offer in certain areas because you only offer the high price items or something along those lines.

PROFESSOR SLADE: Maybe I should postpone this because this comes into the market power as well. The competition among firms. My comment, last comment, had to do more with geographic market definition. You can not wiggle price in one area and see how people switch. It is very, very hard to do a geographic -- I will say something.

DR DURAND: OK. One last comment and we will have to wrap up this to go on to the next session.

PROFESSOR CLARKE: Commenting on the trends that Professor Hamlin was observing, probably a couple of observations I think. There is quite a lot of research now that shows clearly people are shopping more frequently and they are using bigger portfolios of stores. It sounds like I am contradicting what I said earlier but actually they are probably spending less in their big shops than they were previously. They are spreading the shopping across more stores so people's awareness of store choices is probably more acute. It is also more acute in terms of the awareness of the ingress of the supermarket operators into the convenience store sector. I think certainly in terms of qualitative research, not commenting about the economic work, the sort of weight of evidence there suggests that people feel their choices are becoming a little bit more constrained perhaps than they were in the

past. I think part of the attraction of the supermarkets to consumers is part of the unobservables and where the attraction comes from. These stores over the last six years but even over longer than that, there has been a huge movement in terms of the space planning techniques, the range planning techniques of these large multiples which are making those stores much more attractive to consumers than they would have been in the past because a given gross area of a store is now a much bigger retail area. There are much fuller ranges compressed within those. In terms of how that is panning out, in terms of trends, I think people are seeing these stores as potentially offering more choices, and across that is spreading across sectors into financial services and electricals and some of the other areas that have been talked about. I think the point about the internet channels and the internet option is an interesting one. We have been looking at, and continue to look at, how people are using internet for grocery shopping. It is still a relatively modest part of their expenditure but I think, if anything, consumers have become more price aware as a result of being able to look at prices on the internet for supermarkets.

DR DURAND: Thank you.

CHAIRMAN: Can I just say one thing. I hesitate to say anything in this august highly qualified environment and I speak entirely as a lay observer, but just to follow up something Alan Hamlin said. I think the issue that has

been put to us relates to a phrase which I do not think anybody has used which is 'one-stop shopping' which figured in our 2001 and subsequently. I think the question posed by the more frequent shopping pattern may be deriving from greater emphasis on fresh and chilled produce, is at what point the one-stop shop ceases to be a feature because you are making more shopping trips. It is not just a matter of words I think. I think that is by of we of explanation.

PROFESSOR CLARKE: Can I just come back on that point because I think of the things that we have done in some of our published work is we have looked at a particular geographic area which is fairly typical in the early 1980s, and again in 2002/2003, so 20 years apart we have done the same study. What you see is people using -- if we just focus on supermarkets for a second -- households using supermarkets much more frequently because of that reason. I think that links into the point that you were raising.

MR SMITH: Another point that Peter Freeman mentions, this frequency of shopping. There has been a lot of work on loss leaders and the sort of pricing incentives that arise from one-stop shopping. Clearly if you have a more frequent shopping, even if it continues to be one-stop in some sense, if it is more frequent than people are buying less in each stop so that changes the pricing incentives of the supermarkets in some form by essentially reducing the externality on other products bought at any particular trip, so there is an effect on pricing incentives from the

increase in frequency.

DR DURAND: Thank you.

PROFESSOR LYONS: Can I just try to characterise some aspect earlier on. It is simply this thing about whether you are starting on the consumer side and thinking about the market from the consumer side or from the firm side. It has been characterised as firm side as Slade/Davis and consumer side Clarke/Smith, but I think what...

DR DURAND: I am not sure they would agree with that.

PROFESSOR LYONS: It is always nice to polarise on these debates. It seems to me that if you are thinking about competition between stores, between firms, then you have got to focus on the stores. If you are looking at a merger or something that is very much where you start from. We know that in the context of there is product differentiation, especially spatial differentiation, there will be certain things happening in terms of the welfare of consumers which does not just fall straightforwardly out of competition between the stores. In terms of the consumer outcomes then you perhaps get a lot more insight from actually seeing the consumers and the practical number of facias they face and where they are and location, a trip to work or school and this sort of thing. I do not think that they are really either or, but I see them as complimentarities between the competition aspects coming from the firms and the consumer based outcomes.

MR SMITH: I wanted to say that I agree with something Peter

mentioned earlier about the idea of using entry and revenue at the store level; so this panel data study in which you observe a store entering and you can work out the effect of that store on other stores by distance from the store, the kind of work I think in your paper 'Fine Young Cannibals' is similar. I think that would be a very useful exercise to do indeed. I think that would be quite important in terms of geographic market definition and I would agree with Bruce that these are not substitutes. These are actually complimentary approaches and you get different things from each of them. They are both, I think, worth doing.

DR DAVIS: Can I just correct the title. Unfortunately the reference to the 1982 band did not survive until the final version. However, the paper appears in the Journal of Industrial Economics 2006. Let me also just say two final words if I may. One is that market definition for antitrust purposes is going to be all about the ability to raise prices in the narrowest markets such that the firms can raise prices, a hypothetical monopolist could raise prices within that market. One may define an antitrust market narrowly but nonetheless still have concerns if a large number of mergers occur or acquisitions occur outside of that narrow market definition for antitrust purposes. I think that is around a lot of this debate about whether one shop is the right market definition. I will also make one more point with regard to market definition which is that in a famous US case, the FTC vs. Staples and Office Depot,

the market definition the FTC concluded was the right one was the consumable office supplies sold through office supply superstores. That is to say that the right market definition involved a subset of the products that were being sold through the shops rather than all of the product being sold through the shops. I think that kind of distinction may be helpful also in the analysis of market definition in this case, particularly as we think about these extended services like banking and so on that the retailers are moving into.

PROFESSOR COTTERILL: One short comment on FTC vs. Staples. I think it was a subset of stores rather than a subset of products.

DR DAVIS: Yes. It was consumerable office supplies, so it would not include computer desks for example but would include laser printer paper.

PROFESSOR COTTERILL: It was also a subset of stores because those products were often sold in other kinds of stores and they only focused on the superstores.

DR DAVIS: Absolutely, yes. Sold through office supply superstores, not Wal-Mart for example.

PROFESSOR COTTERILL: That is correct.

DR DURAND: The analogy absolutely applies here as well. I am sure the group will reflect on all this very interesting discussion but we have to move on to the next topic which is Market Structure. I arguably presume that we have already agreed on a market definition but we will still let

Professor Margaret Slade tell us for about ten minutes her thoughts on the topic and we will have people around the table react to this. Thank you.

PROFESSOR SLADE: Unfortunately I have a low-tech presentation and I did not get it to the Commission. Would it be possible to get someone else to put these up?

DR DURAND: Absolutely.

PROFESSOR SLADE: I was asked to comment on robust empirical techniques. My first comment is there are none. We can all manipulate them, at least if we are clever, but there are fashions and there are techniques similar to the techniques that are more appropriate than others, depending on the application and the data. What I am going to do is take you a little bit through the history because I think it is illuminating about the complexity of the problem. The simplest thing is the homogeneous manufacture product.

You all have seen the formula with the learner index or price cost margin depending on some conduct parameter and the industry elasticity demand. We will assume that the price is observed the marginal cost is not, the market conduct is not and the elasticity is not and so we have to estimate those things. Notice that if you have the marginal cost you do not need to know anything about the way the firms interact. That was the first approach where we have had a production function which is kind of a recipe that people put together, a chemical formula. We could get a cost function from that and then just differentiate it to

get marginal cost. We could forget about demand and market conduct. The problem with that is, one, the data requirements are enormous, you have to have prices and quantities of inputs and outputs. Once you have it you can not really decompose it into the various factors that might be leading to market power, so that faded. We had the conduct estimation. There was a big fad to do conduct estimation where marginal cost was kind of a nuisance parameter in that and a very simple cost function was used. Essentially what we were doing is we are estimating two equations, demand equation and a marginal cost or our first order condition where the marginal costs in the conduct appear in the first store condition. That is fader there so we can have fader function of characteristics and so forth. That was very fashionable for a while. The problem is that you cannot use this for policy experiments because the fader is not a structural parameter. It does not usually correspond to a particular gain. We do not really know if it is going to go up or down after a merger for example. The secondary problem was identification of fader.

Then we turn to differentiated product brands. We emphasised demand estimations so now we have a vector of prices but we assume the conduct the known usually so we set Bertrand. This is outside the model. Then you can either saw the first story conditions for marginal costs which are parameters or you can estimate it by substituting in some function of factor prices say into the first story

conditions. The problem there is we can not estimate market power if we have assumed the way the firms behave. A few people have actually tried to at least eliminate some model using some crude accounting costs data and usually you can eliminate competition monopoly which you really knew were not there anyway but you can not get the subtle differences across from that sort of estimation. That is homogenous or differentiated manufacturing. Let us turn to retailing in which case you can exclusive dealing, this would be like gasoline, fast food, coffee, autos, that is the easier case. Usually we have just a few brands there.

If we are looking at the retail sector, the quality is controlled usually by the manufacturer. People do not go to Starbucks because it is the best coffee in town. It is because it is predictable. We know what tape of coffee we are going to get. We do not have to worry so much about quality but the costs are a really big factor because rather than having some sort of a recipe, a technological formula, we now have to worry about motivating so we have to give the retailer incentives to invest and to have provide services and to use private information, and these are much more difficult to estimate but at least in this context low costs are still good and the market power tends to be upstream. The individual Starbucks retailer does not at least have much more bargaining power when dealing with Starbucks. The final is common agency which is grocery stores and I want to convince you that this is a very, very

difficult problem. First of all we may have thousands, 50,000 SKUs in one store. That means we can not look at individual prices and quantities, we some to have some indices which are -- either we take the same products across stores and at least we are measuring the same thing but then those products have different importance for different stores or chains, or we look at revenue shares and then we are comparing apples and oranges. Two big problems that are introduced, one is the quality difference. I do not buy my food at the grocery store. The reason is that when I put a pork chop in this skillet I do want to see a milky liquid ooze out as 20 per cent of its weight is dissipated in steam. I also often go to Tesco's or Sainsbury's and find that although in theory they stock national brands they do not have anything but their own dishwashing powder which I can not get the cap off and it cakes up in the container. That is the first thing, quality. The other is monopsony power. The market power is now with the retailer often and it is hard to distinguish between those two types of power. The cost now becomes two sorts: the motivational I have already talked about inventory control is a big factor but there again low costs are good, but if we go to monopsony power and exploitation, low costs are bad. We cannot even say when we see low costs, what we have seen. That means that you can have two chains. We can not use the learner index as an index of market power because you could have two chains

with the same mark-ups. One is the efficient and has low cost and it sells high quality products so it has high prices and the other has low costs because it exploits monopsony power and high prices due to monopoly power, so we cannot distinguish that. Once we are in this quagmire what can we do? This is where your question comes in. I would not start by fine tuning. Do we have continuous or discreet or do we have individual locations and so forth. What I think should be done is to try to uncover the empirical regularities. There are too many factors here. We would like to know what are the important correlations in the data. This is sort of like the first part of the earlier supermarket study. Again, I think it is important to have a panel. I would start with chain and geographic region, smallish geographic regions and unlike the previous study, not just look at prices but look at quality. I am sure you people who have work with supermarkets can think of better things than I can but one possible measure is the fraction of national brands, variety, the number of SKUs, measures of nonprice competition, your coupons, promotions, advertising and so forth. Then as a function of the own share, the number and size, distribution of rivals, some measured geographic dispersion, the usual controls. One thing I did not say but it came to me while you were discussing is this idea of ownership of convenience stores could be in there as well. I would like to know what it is that varies -- not even causal, just correlations,

according to the local market conditions before trying to go into the details of the structural estimation. Forget about what is a market. The bottom line is I am not very optimistic. I think it is going to be very hard to disentangle all these things, monopoly, monopsony, what link of the chain, how the rents are divided. Marketers do this quite a bit but they are willing often to put on a lot of structure on the problem. We have the upstream gain, we have the downstream gain, we have the bargaining in the chain, and we are not going to get the data to tell us all these things. If we understood that then we could force the data into a very structural context but I would not want to start there. The other thing is efficiently versus exploitation. I am not so sure that suppliers in the usual sense are exploited. People like Nabisco and large common companies are probably pretty capable of taking care of themselves. My guess is even -- we are not dealing with family farmers but with agri-business. I would say that from Wal-Mart's experience, the people who are exploited with the workers, I do not know if that is true here, but in the form of many part-time jobs so they do not have any kind of medical or unemployment benefit and so forth. My pessimistic conclusion is I can see the Competition Commission having many inquiries from now on and having no structural remedies, that is there will always be a Gerry Houseman who is willing to say that consumers are infinitely better off because Wal-Mart entered and provided

low prices. I just do not see how we are going to go beyond that.

DR DURAND: Thank you for that rather gloomy presentation.

CHAIRMAN: Can I just say I do not know whether we draw comfort from Professor Slade defining endless as 'a lot', rather than inquiries that never end.

PROFESSOR SLADE: I meant 'many'.

DR DURAND: At least we will be reassured that we will be employed a for a long time here. Any reaction to Professor Slade's comments?

PROFESSOR COTTERILL: I have a quick reaction. I do not see it as gloomy but that is my own bailiwick. When Margaret started off with all these new empirical industrial organisation I thought she had left out the traditional market share concentration price type of study but she actually ended up with that at the end. I commend her. That is what I did in 1986, a long time ago. A great deal of work in the United States has been done along the vain and, in fact, our antitrust policy in retailing rests squarely on that. There have been virtually no studies of the more elaborate type that Howard and others have done here which is really very interesting to try to take it to the next level with the complex data and complex computing, so welcome home to you on that. I would say that there are a number of issues there, one is endogeneity of share and concentration and things like that. You can certainly control for those. Your 2000 study, you proceeded quite

admirably along the those lines with a number of regression analysis of various data situation sets you had. Some of the data sets you had at that time were provided by the different companies and were not comparable across chains because of different was baskets and even different weights. That can be controlled for. You can get a better set across chains. The other thing on the quality that Margaret says is hard to measure, I am not so sure it is hard to measure if you not go intrachain. My work in 1986 looked at two chains in Vermont. The quality within a particular chain does not vary from store to store I would not think. It is the same products, private own label and brands, and chains often have the same practices in their different stores. 'Chains' I mean multiples. When you say 'chains' multiples. Multiples replicate the same practices across their stores, that is their efficiency. If you went intrachain you would have a good chance I think of looking at pricing in different local markets. What is particularly disturbing is what Margaret brought up about national pricing. If, in fact, chains in this country now set the same price from the South of England to the tip of Scotland, that is an amazing and astounding fact which right there I would say is very square evidence of lack of competition in local markets. If they do that there is no sensitivity at all to local cost, no sensitivity at all to local demand, that thing os not a competitive price, period. I can not believe that chains would be doing that.

Its suggests incredible discretion on their part, incredible pricing power to do that. I would leave it there.

DR DURAND: Thank you. Any other reaction?

MR SMITH: On this business about local price flexing and it being a sign of lack of competition, I think it is worth pointing out that on the three areas which the 2000 inquiry claimed was evidence of supermarkets acting against the public interest was local price flexing, but I do not think it was intended that this should mean there should be no regional differences. I think it was the evidence which actually when I was working on this I discovered that when a Tesco was within a certain distance of an Asda about a mile or so you would find a different price band being allocated to that store. That we thought that was probably what some of the other chains were doing too. It was that kind of local price flexing, varying depending on the local competitors that was, I think, the type of local price flexing that was considered distortionary. I do not think the Competition Commission felt that different prices in different regions would be a bad thing, it was very much local competitive effects. I agree that it is a bit odd that prices do not vary from one region to another but it may be that the chains think that this is good public relations and a good marketing opportunity to claim they set the prices the same regardless of where you are. It may just be an appealing thing to be able to say and to

market yourself on the basis of and a good we to defend yourself in the public policy debate that goes on. In terms of some of the points that Margaret made, I think I would agree that that there is lot of opportunity to reduced form work what you regress prices on local market structure and due...

PROFESSOR SLADE: Prices and quality.

MR SMITH: Prices and quality on local market structure.

PROFESSOR SLADE: And on geographic dispersion. I am sort of just extending what you said earlier.

MR SMITH: Yes. I think there is lots of opportunity to do that. Also, of course, the Competition Commission has got access to some things that us as ordinary researchers do not have. For example they have the costs, so you may in fact be able to do a proper profit regression.

PROFESSOR SLADE: The problem with that is as I have pointed out, it could be due to efficiency -- it is not going to tell you a lot. Let me just say within thing about this: If it is bad to price because of differences in the competitive environment what would a structural remedy do? I thought that was the whole point, is that we introduce competition so prices will fall but if we do not allow we are aiding the firms to have high prices. We are tying their hands. They would, I would love to cut the price but I am not allowed to by the Competition Commission.

DR DAVIS: I think we can draw a fairly strong distinction between local pricing, normal competitive conditions

showing up in prices and what might be closer to predatory pricing where we are actively killing off local competitors. I think most of the economics profession would recognise that that can and does in some industries is happen and is not a good thing. If subsequently, unless there are no barriers to entry so that all you do today is generate low prices and there is no benefit to the incumbent firms in the future. I think that is a central distinction so we should -- the Competition Commission I think should certainly be encouraging local price pricing but certainly should not be condoning anything which looks like predatory behaviour on the part of incumbents so I do not think there is a really a distinction here in between price flexing and regional pricing, or at least there should be from the economics point of view.

PROFESSOR COTTERILL: I would agree. In addition, on price flexing, that perplexes me as an economist that you think that these large chains would use price to drive the rivals out. There is a pretty good lurcher in the industrial organisation called Raising Rivals Costs, Zylof and Shepman have a very simple little very readable piece from about 1987. The efficient way for a leader like Tesco to drive its rivals out is not to cut price when it has got 30 or 40 per cent of the market to drive this little get guy out that has got five or ten per cent of the market. Tesco would figure out a way to raise their rival's costs, like through the planning system or like through advertising

that they have an advantage of advertising to over 30 per cent of the market whereas the small firm can not and has very high per unit advertising. I think the concern for predation might be real but I think that the focus on price flexing is wrong. You should be looking at noncost predatory moves by large chains.

DR DURAND: I think we will revisit the pricing aspect in the last session, but I would like if you do not mind that we -- I know it is related pricing and market structure but also discuss the relationship between a market structure and possibly market power to go back to what you said, and possibly the identification of barriers to entry which will be a natural link to what we are going to talk about later.

PROFESSOR SLADE: Is there going to be a separate presentation on entry?

DR DURAND: No. We will discuss land planning in particular.

PROFESSOR SLADE: I thought there is so I did not say anything about it.

DR DURAND: You can definitely add something on this topic on entry because it is connected to market structure.

PROFESSOR COTTERILL: I will say something on entry because the briefing paper that came to me focused on Rice and Breshien's piece on entry which I do not think is the best piece. I think it misses the boat. That is really a monopolistic competition model that barbers very small firms. I think that where one ought to be looking is the

dynamic limit pricing and stochastic limit pricing kinds of stuff that people like Robert Masson and Channon back in the 1980s did which are looking more squarely at the issue of whether there are particular structures due to economies of scale or scope or product differentiation that limit entry. A paper by myself in the Journal of Industrial Economics 1992 applies that to the supermarket industry in the United States and goes one step further because in the 1980s the big issue was not really entry barriers and of itself, it was really contestable markets. You recall in the 1980s people thought that entry barriers was a fiction, the real issue was the potential competition by itself would forced prices to competitive levels. You did not even need entry, just the mere threat of entry would keep prices at cost. Of course, the Bommell, Willig and Pansar book is the one that established that idea. My paper in 1992 looked at retailing and generalised the structural model to allow for testing for contestability as well that the mere threat of entry had an impact on prices. In fact, it did not in the American industry. The mere threat of did not affect supermarket prices and, in fact, there were entry barriers in supermarkets. I think that it starts with a guy named Bor, Masson and Channon's piece. There is a very fine piece by Richard Gilbert in the Journal of Economic Perspectives, I believe 1989, which reviews four different competing ideas of entry barriers including Chicago efficiently rent hypothesis which probably has some

validity in England because of the planning system and the limited store sites that the high profitability of English supermarkets which is like twice the size of America. People here have told me, such as Ian Clarke and Neil Wrigley, that is due to an efficiently rent of location. That would be a valid high profit. If there is truly such scarce sites and very few people have them then you have entry barriers. Indeed, you would have higher profits because of those, not because they are necessarily charging higher prices because of lack of competition against supermarkets but because they simply have higher costs. There is some efficiency rent that they are getting a rent that is built into their profitability. I have often thought that that was the case in the UK relative to the United States.

PROFESSOR SLADE: I agree about the papers on entry that are cited but for different reasons. I do not think they are the right ones. First of all the focus is on uncovering these unobserved entry cost functions and, in particular, the fifth cost which is not particularly relevant here but they are static models and they assume long running equilibrium so the enth can make a profit but the end plus first can not. This is not true in a dynamic world where you may be behaving in order to prevent entry say and so I think one has to go beyond that.

PROFESSOR COTTERILL: You are talking the chain store paradox with...

PROFESSOR SLADE: No, no. The way they do it is they say 'OK in this market we have three firms'. That means that the entry costs were such that if you take current profits plus the entry costs, a new entrant cannot make a profit but at three they can so four is too much and three is an equilibrium number of firms, and that is not necessarily the case. That is the assumption that allows you to identify the parameters of the entry costs function.

MR SMITH: I think people have a right to be skeptical of these models and the reason Margaret gave. The same applies to the fact you have a very tight planning system because these models assume that another store or another firm would not -- above what you observe entering, would not be profitable. That is the identification assumption, that a further store would be unprofitable and that is why you do not observe it happening. We all know that in most cities a further store would be profitable, they are just prevented from happening through the planning system and so the identification assumption would be very questionable.

DR DAVIS: My sense is that there are more modern techniques, Breshnahan and Reiss is back in the late 1980s, which may be more helpful and will relax the form of identification. However I think there is going to be a number of probably preliminary other steps and, also, one big concern. Preliminary steps I think are really to be very stringent with the parties in asking for cost data. There is an awful lot of evidence on the nature of fixed

costs and the nature of economies of scale at various levels which can be generated by asking them for the right cost data, data which I have no doubt they have in their inquiries. I have no reason to doubt that they would keep track of and which you really should ask for. That data will inform directly about the kinds of estimates that you are trying to back out of the more -- of the structural models, *a la* Breshna Hann and Reece. I think looking at costs directly is often a very productive approach. The most famous example of looking for the limits of economies of scale is in the electricity industry where -- electricity generation -- where if you go out and estimate cost functions then you find that in fact you can have lots of small generators and that electricity is not actually a natural monopoly. I guess the work of Nerlove and Christensen and Green is most directly applicable in that context. I would say look at cost data. Secondly, I think there is an important distinction in the economics literature between the world of exogenous sunk costs *a la* Breshnahan and Reiss, and endogenous sunk costs, *a la* Sutton. This may be a case where the latter is more directly relevant. If one wants to think about the distinction in intuitive terms, it is that firms are choosing items like the level of advertising expenditure. That level of advertising expenditure may effectively be a fixed cost and therefore generate an economy of scale. That will change the relationship between the number of

firms in the market that you would expect to see and market size which is the kind of relationship that Breshnahan and Reiss used to back out their estimates of fixed costs. It also brings you to this world in which you have to think about what the entry barriers are. I think there are grounds for investigation of issues like advertising for generating entry barriers. Again, going to FTC vs. Staples, the entry barrier that was isolated was actually advertising - if you are a large chain with ten shops in a market then you can average those advertising expenditures across ten shops, whereas if you have got one you have got to put the same advert in the market's newspaper and so you only get to average it over one shop. You can take a different view about whether that is efficient or not. It certainly could generate an economy of scale which could show up as an entry barrier to somebody wanting to come in and build an individual shop in that particular market; and so should be areas which I think you should look into.

DR DURAND: Thank you. Bruce?

PROFESSOR LYONS: Can I just pick up on some of that because I was a little puzzled when you said back out the fixed costs and then said there were endogenous fixed costs so there is an issue there. This is actually some very interesting work by a guy called Paul Eleckson. I am not sure if this paper has been published, I have got the working paper of last year, looking at the endogenous sunk costs model of supermarkets in the States. There,

basically, the idea is the bigger the market than the more firms invest in the distribution system and also the bigger the range they put into their supermarkets; so however big the market is you do not get more supermarkets, you just get them investing more and having bigger stores and the rest of it. I am not sure if we see that in this country, I am not sure if the planning regulations stop that or interfere with it. The actual question that the panel here might have some view on is whether there might be something from observing local market structures and national market structures to feedback into how firms are competing. Can we observe the structures and then feedback to competing. For instance, Eleckson finds that the four firm concentration in the States is about 60 per cent, well it is about 70 per cent here, and whether there is something to be read into the fact it is more concentrated in the UK despite being smaller markets than the states.

MR SMITH: That is quite an interesting paper by Eleckson. Just to clarify one thing though, it is not the number of supermarket stores that remains constant. It is not like the stores become bigger and bigger and you only ever have three in any city. It is the number of firms which remains constant. I did some work along the same lines of Eleckson and found that we got -- I chatted to Eleckson about this. We got very similar patterns for UK data so the number of firms does not increase more than four firms or so. There are not that many firms any anyway so the number of firms

does not go up that much no matter how big the market becomes. That is comparing cities of different sizes. You do, of course, get entry of a second or and third supermarket as the city becomes bigger, but after that there is not much increase in the number of firms going. You do get a very concentrated market structure and you do get these store sizes increasing as the markets get bigger.

PROFESSOR LYONS: What about the Breshna Hann and Reece type stuff, as local markets gets bigger, the entry of stores. Have you got some work on that?

MR SMITH: You mean, does it go up proportionately...

PROFESSOR LYONS: Precisely.

MR SMITH: I have been very reluctant to do any of that Breshna Hann and Reece stuff because I did not really believe that -- what they were trying to uncover was pricing effects. They had this story that as the third entrant then, all the competitive effects were exhausted by that point and then there were not any further competitive effects after the third entrant. I did not believe that really applied. That sort of question seems a bit unlikely to be revealed for the reasons that Margaret and I mentioned earlier. We believe the planning restrictions prevent this kind of identification assumption from working.

PROFESSOR LYONS: Do you know the work that Rachel Griffiths is doing at the moment?

MR SMITH: Yes.

PROFESSOR LYONS: She seems to find that there is some of this effect.

MR SMITH: Yes. I have not really studied her work very carefully so I should not comment on it.

DR DURAND: Maybe we can stop here and actually carry on the discussion on the next topic. I guess we will have to understand whether concentration comes from this endogenous sunk cost or the planning regime. We will take a break here for about ten minutes and we will reconvene at four.

(The meeting adjourned at 3.50pm and resumed at 4.00pm)

DR DURAND: We have already covered or at least broached on the coming topics. We will go on in the same format. We will discuss the next hour or so the role of the planning system and then we will move on to pricing behaviour.

Firstly, I will ask Professor Ronald Cotterill to give us a ten minute spiel on land and planning and then we will have a discussion on the topic.

PROFESSOR COTTERILL: On land and planning?

DR DURAND: If you want to add also barriers to entry, that is fine.

PROFESSOR COTTERILL: Barriers to entry to? I think I have also said what I know. I was not prepared to give one of these ten minute spiels so I will recap a little bit about

what has been said about it already here. I think that the most general model would be the kind of thing that Peter mentioned about exogenous and endogenous sunk costs and the issue of how the planning system contributes to those kinds of costs. Ultimately, the impact of planning on margins that supermarkets have to have in order to stay in business. It seems to me that the impact of planning has then two dimensions then. The two dimensions are common in industrial organisation and analysis of pricing. One is efficiency and the other is power. From the standpoint of efficiency you are covering cost, the planning commission, as I understand it, creates a great deal of costs for anybody who would enter a particular city because they have to go through a planning process and, in fact, ultimately, be awarded the site. There is cost in participating in the process and then, of course, there also the cost if the sites are scarce, the person that owns them which might be the town itself or the city receives a higher price for that land. What that means is that the supermarket that goes in there has to generate a profit. Price minus marginal cost is the difference. That has to cover not only return on invested capital, it also have to cover fixed cost which are either exogenous or endogenous. However you look at it you could call the planning systems cost endogenous, they are created by policies so that the price costs margin could be very wide in British supermarkets because of the need to cover this endogenous

fixed cost. The price costs margin of itself then is not indicative of market power against consumers or market power against farmers. It is simply that there is this entry barriers and there is a rent to it. The other aspect of entry barriers I think that warrants consideration is the issue of -- I think I will stop there. I was not prepared really to say much and that is pretty much what I know about planning and in Great Britain. I would say though the two days before I came here I spent some time in Shropshire and Wales and the fact is, as going by train from London to Shrewsbury, I saw beautiful English countryside with cattle and sheep every place. Every place. I can not believe that the farmers are being inordinately discriminated against in Great Britain. I must say that I was here 40 years ago as a student and I saw this same thing. I would have expected if we had been in America over those 40 years that at least half of your countryside would have been gone into suburban sprawl and retailing and suburban housing and other things; so the planning system in Great Britain I think has to be valued, at least from my external quick view of it. I think it is a net social good. I think you probably have to deal with it carefully in looking at supermarket pricing and power and look for pricing power beyond what that system creates or, at best, looking at it as a trade off between some social policy goal of planning and keeping cattle and sheep and green space and the antitrust goal of pricing

efficiency in the markets and pricing at cost. That is it.

DR DURAND: OK. Thank you. I am not sure if the common agricultural policy is now responsible for part of what you saw on your trip.

PROFESSOR LYONS: That is a European speaking.

PROFESSOR SLADE: Certainly for the rape seed.

DR DURAND: I will like to add that land and planning is a topic that has received a quite a lot of attention lately and I am aware there is some research going on to try to uncover the impact of the planning regulation on the groceries market. Any reaction from anyone around the table on this particular topic?

DR DAVIS: I would like to make one reiteration really which is that I think it would be a real mistake to evaluate the costs of the planning system without looking at the benefits and so I would hesitate before you removed stringent planning requirements on supermarkets as an outcome of this inquiry.

MR SMITH: I think also one of the things which it is quite easy to spot if you look at the data on market structure and concentration is that many of our -- and this has been picked up in the press where they call it 'Tesco Town' -- many of our cities could have more competition given the number of stores. It is not actually just a question of whether we should have more stores, it is whether we have enough competition given the number of stores. One way of increasing competition is to find ways to increase the

number of firms that are present in a city or any given number of stores. Whether that is through changes to the way planning is done in the future for new stores or whether -- in other words, whether it is done through making applications conditional on not having a store already in the town or whether it is something more drastic like a split up of the reallocation of existing stores. Those are two alternatives but the principle is the same.

PROFESSOR SLADE: I really do not know anything about planning in the UK. But one thing that does not seem to come out of this paper that I thought was an issue is not just planning but preemptive use of planning that has been used as a strategic device. Is that true?

DR DURAND: That is an issue that the Competition Commission will have to consider.

PROFESSOR SLADE: I was told that most of the potential sites have already been allocated and it is very, very hard for a new entrant to come in.

DR DURAND: The planning system may make a land scarce and whether...

PROFESSOR SLADE: Is it scarcer for some than others? There is a strategic variable.

DR DURAND: Exactly.

PROFESSOR COTTERILL: I think it is, there is something called 'land banking' and I read about in your materials. I was really surprised to see it is here because in New England in the North-East, some of our local supermarkets

chains there have been very up in arms on that issue. They maintain that the dominant firm there, Royal Athole Company Stop and Shop has, in fact, acquired many attractive sites in areas where they would like to enter. In many instances they have acquired them literally overnight. They buy it for a certain price and they turn around and sell it back to the very same owner for a much lower price with a caveat on the deed that says it can never be a supermarket. They are basically processing the sites that they think are desirable and making sure that they never become a supermarket. In our country the antitrust people have looked at this and they have really have a problem with it, finding a way to challenge it because they see it primarily as a move in the real estate market, not as a move in the supermarket industry. I guess the basic answer is they seem to think that there are many sites available and that this is irrational behaviour on the part of the dominant firm to do that is. It is a live issue and it may come before the courts in the future in the United States as well but right now it is just simmering, yes.

PROFESSOR CLARKE: I think one comment, and this is somebody who has worked in a sense against the planning system or tried to work with the planning system from a commercial point of view. In the early 1980s there was a thing in some of the academic literature and a lot of talk about 'when is saturation going to arrive in this sector' and the so-called 'race for sites' in getting their proportion of

the sites that were possible. All of the major food retailers in this country were looking at the potential nationally to drill down to local levels and estimated how many stores they could develop. Those barriers have come and gone, and they keep coming and going. The thing that strikes you is that supermarkets continually see now -- and this is one of the big changes -- continually see more potential than they did five years ago, more potential than they did five years before that. The one thing that has clearly changed, that is allowing them to do that -- and they talk in these terms -- is they are able to 'dig deeper into people's pockets'. They are digging deeper into the local markets, they are taking a larger proportion of market share, whether that is the one-stop shop or the top-up shop. When they do it they look at the potential of a network of stores so they are using all sorts of discounted cash flow techniques to look at impacts on existing stores and looking at the profitability of the new trade they are getting. The one thing that strikes you, and I suppose it is a power issue really, is how within the planning system, and there is what, 380 of them or so in England and Wales, how powerless the planners feel as to what is possible within their given towns. I think that is just a conundrum but that is one of the ways in which this issue plays out. A related aspect of that is that clearly some towns can support significantly -- otherwise equal towns -- can support more stores than others and a lot of

that is down to an issue that was in the papers as some of the things to think about but we have not really talked about, and that is the issue of demand external to the local area. In all of the evaluations of sites, whether it is large stores or small stores, most of the supermarket chains will look at the proportion of trade they can expect to get from the main local area but then there is -- they recognise that dependent on two things, on if you like the gravity of the town within the sort of hierarchy of towns and so on in the area certain towns are likely to pull, in gravity terms, more trade to them. Then also, within that, the micro location is going to allow them or not to take a higher or a lower proportion of that trade. I think in terms of the planning system that is a conundrum that they face, which is how to determine in the way that the retailers do, when that demand is saturated.

DR DURAND: It is true that actually in the planning regulation there is a certain element where the local authorities must determine whether there is sufficient need for additional grocery stores. Whether they are best suited or whether the retailers are best suited to determine this is, I guess, your point.

PROFESSOR COTTERILL: A comment on Ian's comment about saturation and who enters. Usually we think of in economics, if the market is growing and in some way they are finding ways to grow the market, usually that would lower the entry barrier. A growing market would be easier

to enter but it seems like there is a juxtaposition that the growth is being generated by your dominant supermarket chains by doing things like putting petrol in the car park or expanding into nonfood items in a way and that creates a cache for them with the planning agencies because there are these new stores with new bundles of services and so on and they preempt the ability of growth to allow for new innovations or new entrepreneurship by other people. I do not know if that is the case.

PROFESSOR CLARKE: I think the cost of the planning system to the multiples is an example of one of your endogenous costs that have spread, like advertising, across their total activities; so it is an instrument that is brought to bear for them locally.

DR DURAND: Have we exhausted the topic?

PROFESSOR HAMLIN: Can I just say perhaps one thing which links back to something that we were talking about considerably earlier. Clearly the planning regime and other aspects of the economics of sighting new stores differs markedly as between one-stop shops and convenience stores and so one of the things that we might be hearing from various players in this market is that the planning constraints in certain locations might incentivise into different store formats and that might be one reason why you see the multiples entering convenience stores where the planning constraints are much less rigid, must much less binding and yet, at the same time, can still use their

leverage to create a town with many facias bearing their name, let us say, without mentioning any specific name. Is that something where these various issues that we have been trying to identify separately this afternoon perhaps link together again, that if there is this planning induced by in the distribution between one-stop shops and convenience stores, that feeds back into the structure of the market which will feedback into the competitive behaviour within those local markets as well as, potentially, market definition issues? That was intended to be a question.

PROFESSOR COTTERILL: I think we agree with you.

DR DURAND: Walter you wanted to make a comment?

MR BECKERT: Not to this question. Margaret mentioned the preemptive acquisition of land. Can I just pick your brain. In order to assess what the impact of this is on whatever measure what -- do you have any of what reduced form or other approach you would use, what data you would like to have in order to get a handle on this?

PROFESSOR SLADE: It is something I have not thought about, nor do I know if it exists. I read about it. Either people tell me or in the newspapers or something, but I would want to know a little more about whether or not this is a problem. Do people go in years and years in advance and acquire sites and then sit on them; so I do not know.

MR SMITH: Presumably it would be interesting to find out if they did this in Tatton Moore. They are more likely to do this in a town where they were already present than in a

town where...

PROFESSOR SLADE: Assuming one could look at time to enter from gaining the site as a function of all sorts of other things but I would have to really think about it.

PROFESSOR COTTERILL: I think I read some place that in Great Britain they can not do what I described in America where they can buy it one night and then sell it back at a lower price with some kind of a restriction on the deed. That is not allowed, at least on concern conditions I think it was not allowed. If it was allowed that is a fascinating test of how important that activity is to the chain that is engaging in it because, think about it, you are you are buying a vacant lot some place and you are spending \$100,000 overnight just to make sure it does not become a supermarket. You have to spread that cost over your other supermarkets in the market; so you too must have some market power there. If you are other stores were competitive at cost you would not have the money to go out and buy that lot and put that money in some landowner's pocket. There are ways of looking at it economically I think if you have that particular approach but I am not so sure you have it here. To measure the idea of preemption we would like to measure its impact on the market and that is one way I thought of doing it in the United States because, preemption costs money. Where? Why? How? It does not seem to be any kind of innovation that lowers cost. It seems to be a cost elevating activity, unless there is some

dynamics story that somehow comes into play. Even then it is somewhat suspect I think.

MR KIRKPATRICK: Could I ask in this case, either Professor Cotterill or others, we have had a lot of evidence -- it is no secret because it is published -- from the supermarket chains themselves that they buy land in order to develop stores. The questions that are in my mind about that are, if that is why they are buying land how -- rather, how would could we test that contention? If you have any insights into either how we can test either the contention that land is being bought for development rather than not or, indeed, on the question of whether it actually matters what their intention is or, indeed, whether there is an economic impact that we might worry about, whether they are developing the land or not.

PROFESSOR COTTERILL: I gave you my ideas on it already. I do not know if anybody else has any but it is an interesting question.

MR SMITH: I think there is scope for just looking at that, like I said earlier, whether or not they develop this site and impact on the delay. The delay between buying and developing the site and trying to see if that delay or lack of development can be explained by their existing presence in the town therefore their desire to avoid competition. I think you could do something of that kind, the patterns and the data would seem to suggest it should be possible.

PROFESSOR SLADE: There is an article by Doug West in the

Bell Journal about supermarkets in Canada I think but, anyway, looking at preemptive tests I would not suggest that that was -- that was a very long time ago but certainly there is scope for testing but. Do we care? Yes we care. It is just like proliferating the products. If it is really preemption and it is being done to inhibit entry, we care about that as much as any other entry barriers.

MR SMITH: There is clearly a planning system that prevents new entry, that is pretty obvious. There seems to a scarce resource, new sites for supermarket development are understood kind of a scarce resource. I think if that if you prevent a new supermarket from happening it would be profitable for it to enter. That seems to me a clear cost to consumers and to society.

MR KIRKPATRICK: I think my question was, in part, was is it more problematic if the result of that land acquisition is another store of the same facia or no store at all. In other words, is it bought solely with the intention of preempting somebody else or is it bought with the intention of filling the space yourself and thereby presenting...

PROFESSOR SLADE: I think no store at all would be worse. It is output restriction as opposed to just brand expansion.

PROFESSOR CLARKE: I do not feel that they are doing it in a predatory way. I think the way it is done is that they are cognizant of the fact that there is a finite number of good sites that are available and, of course, they are learning

about how many stores they can put into a given area over time; so that the boundary moves but at any one point in time they are aware that there are a certain number of appropriate sites in a given locality to develop stores given the demand that is in that area; so they go after those sites. Some of the retailers, no names mentioned, are better at doing that, seem to be better at doing that others. The incremental effect, to answer your question, in terms of perceived benefit to the customer, I think is one that we are trying to address in some research that we are doing at the moment, by drilling down to that level and saying OK, how do consumer reacts to different assortments of stores in a given locality? If satisfaction is the dependent variable what are the store assortments, large and small, different brands, different formats, different sizes of store, and can we test and estimate the effects of those potential contributions to the overall utility to the consumer which is about satisfaction with the assortments of the stores in area rather than particular stores. I think it matters who it becomes potentially -- which site becomes which retailer -- but I do not necessarily think they are doing it in a predatory way, will be my view.

DR DURAND: Good. Thank you. I think we will have to finish now here on this topic and move on to the pricing issues which we who are have talked about a little bit. In particular, we are referring here to the OFT document. Its tell us a bit about local price flexing and below cost

pricing and whether those practices have any predatory intent in some ways. We have asked Professor Ian Clarke to give us a ten minute on this and then we will open the discussion.

PROFESSOR CLARKE: Certainly pricing is not my area specifically. I think clearly we have touched on a lot of the issues, so in a sense we are revisiting some of those from the discussion earlier. Kate, can you just move it on to the fourth slide, please. Three issues that were highlighted in the document that was circulated. One about whether larger retailers are in a position to and do, in fact, distort perceptions of value for money and damage the competitiveness of smaller retailers. That is one issue I want to comment on and make some observations on. I think the other is to do with price flexing and whether that forces weaker firms to exit. Then the third area, which I am particularly interested and will probably spend more time flagging up some issues there, is the longer term effect of developments and closures, particularly on consumer welfare, which is a particular interest that we have. Can you just move it on to the next slide Kate? I think on the surface, the effects of pricing appear relatively simple. We know that small retailers lack the national buying power to channel to particular local markets compared to the multiples. We know that loss leaders, for example, are much less possible. Whilst the multiples may or may not flex prices or vary the average

price as is talked about in the in the document, or even price below cost, I think the particular pricing strategies that they use at the local level that are very effective are to do with competitiveness deriving, if you like, from national buying power being applied down to the local level, as every day low pricing in which consumers are being asked to look at the portfolio of prices and be aware that there are fewer retailers that could actually surpass particular prices offered. The other strategy to do with pricing high on some areas, low on others, is all to do with the fact of known value items and so on within the stores. Could you just move on to the next slide, please.

The reality, of course, is the distortions, if they are distortions, you could argue come from unobservables. Some of them have been intimated, and I just really wanted today, to bring up one or two of those again. I think some of the mechanisms if we wanted to call them that, that the larger retailers seem to be able to use are not just the obvious ones about selling on, and appealing on, non-price terms and using their buying power to reinforce things. They are offering value packs and special high-end items, which are actually more to do with things that Katja Simm talked about in her paper -- 'idiosyncratic sources of profitability'. We have hinted at that with the effects of things like advertising brought down to the local level. Clearly the major multiples can have a major effect. A major factor in their local competitiveness particularly,

is to do with the way in which they manage their stores, the logistics systems that sit behind particularly retail brands and so on, the strength of the brands. We know that they have products and services that cut across sector boundaries and they have a very significant effect on maximising the utility of the one-stop shop if you like to the multiples. I think something that does tend to get underplayed are other very significant developments. I do not know whether there is data that the Competition Commission could get their hands on in this regard but over time the retailers -- the larger retailers -- effectiveness of using the space has changed. So in a gravity model for a local modeling forecasting situation, store size is one of the obvious measures, but it underestimates in many respects the appeal of certain particular retailers. It is sort of recovered in the terms of the effects of the brand, I think. They have made very substantial inroads into, for example, through the effect of just-in-time delivery systems, allowing them to devote more and more of the gross area of the store to net sales space which clearly and very significantly impacts on the attraction of the store to the customer. Then associated with that, making much more effective use through range planning and particularly space planning because they know that the goods are going to be there when they are needed when the shelves are just about to empty, that they can actually compress the ranges within the stores to make an otherwise similar size store seem

much more attractive to the customer -- i.e. a 20,000 grocery store might have the appeal of a much larger store as was because of the effects of some of these developments, which are non-pricing factors distorting, to some degree, the perceptions of the customer. What springs out of that for me is, I think, over the longer term it is critical to be cognizant of points at which competitive practices bring about step-changes in provision and potentially force part of that retail system out of business. The issue that we are trying to explore in our own work is, what is the effects of the diversity of -- as I said earlier -- the diversity of the assortment of stores in any given locality, and what is the relationship between that mix and perceived satisfaction. The suggestion from the preliminary work that we have done is that clearly, as you probably would expect, in highly concentrated local markets that perceived satisfaction seems to be substantially less than otherwise might be the case.

In terms of price flexing -- Kate, can you just move the thing forward -- I think that this is probably, as the document intimates, probably less prevalent than it was in the past. I think retailers are certainly more keenly aware of each others prices, but also I think because of internet shopping availability growing significantly consumers themselves, the qualitative research that we have been doing suggests, looking at the use of internet channels alongside stores as channels and formats of

stores, is that they are probably more aware of prices than maybe they have been in the past. I think there is arguably a need now to think about the effects of these pricing and nonpricing elements of competition in terms of creating certain conditions for potentially monopolistic and oligopolistic behaviour. Then the last slide, we flag up in our own work the importance of -- it is hard to know how this fits with a room full of economists -- but the consumer welfare element of local 'assortment provisions' as we have called them. The qualitative research that we have done to date and we are following that up with some very substantial quantitative work in a wide variety of micro-locations, ranging from highly concentrated local markets on the HHI index through to those where provision is seen as perfect or better. Those affects do seem to come through, --- consumers do seem to be aware of the degree of concentration in local markets. I think they pick them up in terms of the way they evaluate the perceived level of satisfaction or not. I think what we are trying to do in terms of the consumer welfare dimension of pricing, or price competition, is to look at pricing. If you look at the Marketing literature there is a huge amount of material that I do not think this work -- the Competition Commission report -- really begins to touch on, but I think it does very squarely address suggest that it is much more than pricing. It is actually also about the store sizes, the brand operators, the brand value of the

particular retailers having an enormous effect on the perceptions of local store assortment. I think if there is one thing I am trying to say out of this, and one thing I am trying to flag up in the work that we are doing that hopefully will come out in the next few months as a result of the empirical research, is at what point do those assortments of stores, at what point do they become 'optimal' from the consumers perspective or sub-optimal and why, and what effect does it have, and can we estimate the effects of particular retailers, particular store sizes, particular locations and so on, which is what we are trying to do. I know I have stretched away from an emphasis on pricing there and touched on many issues but I think, for me, it comes back to welfare issues quite squarely.

DR DURAND: Thank you. Any comments or reactions to Ian Clarke's presentation or simply some remark on the topic itself?

PROFESSOR SLADE: I have a question. Is it true that the independent's market shares are shrinking? On the one hand we heard that people were shopping more frequently and so forth and then also that the independents can not survive.

PROFESSOR CLARKE: Yes it is true.

PROFESSOR SLADE: It is true?

PROFESSOR CLARKE: If you look at it just in store numbers term I think the independent PO and grocery store sector in this country is probably half...

PROFESSOR SLADE: When I say independent I mean anything

below the big four.

PROFESSOR CLARKE: The multiples. I think that is an important difference. If I can just talk about the 'independent' independents...

PROFESSOR SLADE: No, no. I did not mean that as a small -- I meant if you look at market shares they have these big ones and then there are some others.

PROFESSOR CLARKE: The others are the symbol groups, the convenience stores, the chains. Those are getting stronger, getting bigger to some degree, but I do not think to the extent...

PROFESSOR SLADE: When you say independent you mean the one off the Mom and Pop.

PROFESSOR CLARKE: Locally owned stores.

PROFESSOR SLADE: I am sure they are shrinking.

DR DAVIS: I would certainly would agree that welfare is broader than prices and that product ranges certainly play a part. I am fairly pessimistic about direct measurement of consumer welfare using, perhaps, demand systems to evaluate to consumer welfare gains from having a broader product range. I think one area where there is scope for work though might be to look at consumer satisfaction verses concentration so you could certainly run surveys of consumers and ask them how happy are they with their grocery provision in the local area and relate that consumer happiness to concentration measures and the kinds and/or the levels of variety of the products in the shops.

I think those kinds of exercises may be about as close as you can get to direct consumer welfare measures in this context.

PROFESSOR COTTERILL: I have a couple of comments in that general area. They come not only from listening to Ian but also reading the 2000 report earlier today. I think that the 2000 report uncritically accepts the notion that prices could be higher because there are more services in the store. It is somehow that is an out for the large chains that, 'sure we have higher prices because we have more services, we have more quality, these kinds of things'. I think as economists we need to dig a little below that. The fact is that, yes, we would agree that they should have higher prices but those higher prices if there was competition, would be only equal to the cost of providing those higher services. In fact, if adding more services to a store somehow gives that kind of store a particular competitive advantage the higher price due to the higher services might be greater than the cost of providing those services. In essence you have some market power through expanding the bundle offered. As a matter of fact that is the very basis for superstores that were put in the 1970s in the United States and over here our traditional supermarkets were 15,000 square feet, 14,000 metres square. Back in the 1960s that was a big store. Now they are tiny, stores are 70 or 80,000 square feet because of all this other offer. The research there has pretty much shown

that those stores are more profitable that even after taking into consideration the added cost of providing those services they make more money. Also some of the research has shown that there really are not any economies of scale in these stores either. They are not that much cheaper to run on a per unit basis. I think one needs to be careful on that and making the distinction between the price of services and the cost of services. I had another comment which is with regard to promotions. Promotions are a cut in price and much of the stuff that I have read from 2000 seems to imply that they are pretty much driven by the chains themselves. If you look at a paper in 1995 that I gave at a conference in Reading, England, on converging food systems, an American perspective would be entirely different. Here you think that the supermarket multiples run the world and maybe they do but in the United States we know they do not. In the United States the manufacturers, the Kelloggs, the Crafts, they run the world. Promotional activities you see at retail are determined primarily by the food manufacturers. It is a way for them to communicate ahead to the consumer. The retailers is just along for the ride. I would ask you to look a little more closely at the role of your brand manufacturers in promotions in large supermarkets. There are perhaps two reasons for why manufacturers would do that. One is if you have successive monopolies. You have got these branded products with demand curves that have sloped to them, OK. There is

pricing power behind a brand and the fact is that if you have a vertical gnash pricing, two independent pricing points, a manufacturer who prices independent of the retailer and a retailer who prices independent of the manufacturer, they are both going after that monopoly margin. In fact, they get too aggressive and they go too far, it is called double marginalisation. Even Chicago, that paragon of efficient markets, can agree with Harvard on the fact that that is bad. The fact is that you need to eliminate double marginalisation. One way to do that is a trade promotion where the manufacturer talks the retailer into a lower price for a somewhat lower wholesale price and they internalise a double marginalisation and if the manufacturer is clever he can get the retailer to bite for just a little bit of gain and if he gets to keep it all for himself because in America they are the people that study the scanner data and they know that demand elasticities is not the retailer. They know how to price and they can bargain and get the big share of it, so there is a real incentive for manufacturers to engage in price promotions.

The other thing about is that in your 2000 study you talk about it at point 7.76, 'the fear of a promotional fog'. That for some reason that if there was a lot of these manufacturing things, a lot of these price promotions going on, the consumer would not know what the real price is and that that would somehow be bad. If you are a manufacturer that is probably good because what the manufacturer is

doing is planting the seeds in the consumers mind that, in fact, the high price is not always supposed to be there so when the promotion goes away maybe they do not raise the price quite so high, so that maybe the double marginalisation does not go back to what it was, that kind of thing. There is this vertical gain that I think you need to consider too.

DR DURAND: Thank you. Bruce, a reaction to this?

PROFESSOR LYONS: Not specifically to that point because we are going to be picking up on that tomorrow quite a lot. Demarcation disputes. I just wanted to tie together a few things which have been bubbling under, leading up to two questions. If you ask supermarkets how they compete then they come up with the mantra of PQRS. Price, quality, range and service. We have been hinting at some of these things but not going at them explicitly. I would be interested I think, particularly from Ian, about the nonprice factors there in terms of what their influence on consumers is. The quality, range and service, how important are they? That is, as it were, a store level or a fascia level thing, and then there is the importance of the range of facias which I understand from what you are saying you are just working on them; that PQRS piece, how does that fit in there? When we are talking about PQRS, I think that Peter was suggesting that the general way to go about market definition is the SSNIP, Small but Significant Nontransitory Increase in Price. Is there conceptually a

'SSNIQ' or a 'SSNUR' or 'SNISS' test as it were? The impact of flexing on the range or quality or service. For instance, could we get at market definition by looking at these things? What we have been told and I am not sure that we know quite where the truth is at the moment, is that there is limited amounts of price flexing going, it changes according to format, there are coupons and various things. Why they are not flexing price more, whether it is fear of the Competition Commission, whether it is fear of the front page of The Sun that they are ripping off consumers in Kennilworth because their prices are higher than in Coventry or something. Whether it is their computer systems cannot handle it or something but there may be a range of reasons why there are other dimensions of competition that they are flexing rather than price. I just wonder if there has been any work on done on these nonprice factors, perhaps as far as market definition or any of the other issues we have been talking about.

PROFESSOR COTTERILL: You can do that. If you have a study like what Howard has done on these different characteristics you can compute a, 'what if that particular quality goes up five per cent? Is there a significant switch to someone else?' If there is not then in fact you have some power; so you can do that. I do not know in the United States if we have of ever gone beyond price cI did some work on the ready to eat cereal industry merger back in 1993/1994 where we estimated not only the own prices and

cross price elasticities and used price, but we also had elasticities with regards to advertising and couponing in that study. We never went your step to look at those as well to see if they would help define the market, but the data is there. It could be done, yes.

PROFESSOR SLADE: My feeling is that a demand function is a function of X. X could be P. It usually is, but there is no reason why it is not something else, advertising or identical technique for X.

DR DAVIS: I agree entirely. I also think that sometimes you can look at market definition by looking at volume flows as well; so X can just be P. We can also use Q.

DR DURAND: Other comments?

PROFESSOR CLARKE: I think it is a difficult question to answer that Bruce is raising but I think certainly over time the supermarkets would say, I think of our own work shows this, that clearly price has become -- in the range of whatever the initials were, PQRS, have become relatively less important to most consumers over the last 20 years I think. Quality has become more important, the range they are offering that you mentioned, and associated services.

They bring those factors together not necessarily as a 'P' as it the value to the consumers is what they talk about where you can put prices and brands and so on and so forth into one effect. How you capture that, I just do not know. That is what most of the retailers are talking about, is clearly how do you add value and how do you create value at

the level of the consumer? Do you want to come back?

PROFESSOR LYONS: What I was particularly interested to know was what the marketing research tells about from the consumer side, what is most important to them.

PROFESSOR CLARKE: I would have thought the quality and the range. I think a lot of the evidence is pointing to the fact that they have become more and more important drivers.

PROFESSOR LYONS: Is there any specific evidence that you have in mind.

PROFESSOR CLARKE: I can dig some out. I have not got it to hand, but I could dig it out.

PROFESSOR COTTERILL: If that is the case why do we have Aldi and Lidl and Netto here now, or do we have a segmentation of the consumers?

PROFESSOR CLARKE: Yes. That is the other thing that the Marketing literature would lead to, is the strategies are to differentiate the target customers that you are appealing to. Clearly the bigger multiples are targeting a much broader range but the discounters like Aldi and Lidl are targeting really quite specific segments.

PROFESSOR HAMLIN: Can I perhaps pick up on that in that context, focusing very much on P in this sort of emerging alphabet soup. What can we say about practice of below cost pricing? We have talked quite a lot about price flexing and the fact that we do not see as much of it as perhaps we might expect and so on and so forth and there various speculations about that. We see a reasonable

amount of below cost pricing in the majors. What, if anything, explains that? Is there a theory of harm associated with it? Does it potentially contribute to some sort of consumer detriment and does the answer to that question depend on bringing into the market the analysis of firms other than the majors i.e. does it require to think about predatory pricing, driving out nonmajors from those areas or is there some other theory of harm that operates purely within the set of majors?

PROFESSOR SLADE: That is exactly what I wanted to bring up in. Earlier Peter said we worry about predatory pricing but not about competitive pricing. I think it is going to be extremely hard -- I hate to be pessimistic again -- to distinguish in this case. If you think about the old Rita Turner, predatory pricing is pricing below average variable cost. That is OK for a single product but -- and I was interested, there is a citation to a paper by Christopher Cliss about Ramsay pricing. Clearly a monopolist cross-subsidises and if there are strong complementarities it is going to make it worth your while pricing below cost. The Ramsay pricing would bring you down to a zero profit constraint but with the same proportional mark-ups, you are going to have an awful lot more below pricing below cost pricing so the more competitive the market is the worse this problem will get. It is just simply profit maximising behaviour, not predatory. How one distinguishes that -- I do believe that there is such a thing as predation but I

think it is quite hard in this context to get a handle on it.

PROFESSOR HAMLIN: Quite hard or impossible?

PROFESSOR SLADE: I would never say impossible. Howard will do it.

DR DAVIS: In general I agree with Margaret that it is going to be tough in this context. I do think if you saw the narrow product range of local shops, local small shops, being targeted by supermarket chains selling a much wider range of products then that might be at least indicative of something that you might want to look further at. There are enough caveats in there.

PROFESSOR COTTERILL: I think they have more efficient ways of getting those little guys out. The raising of rival's costs, the nonprice ways to predate. They are actually in some of the complaints which I guess you are going to talk about tomorrow, by the independent wholesalers and the farmers and others that, in fact, the large supermarket chains get prices that are -- their wholesale price is just below -- how do you say it. Their retail price, what they are selling the product is very close to the wholesale price that the big chains get. What I am trying to say is that there is buying power discrimination there. We have something called the Robinson Patman Act in the United States which is extremely unpopular among economists and rarely enforced but recently there was a Robinson Patman case in 2000 against McCormack Spices that was settled on

those kinds of principles. Once in a while we find something that squares with the idea of predatory moves by large retailers through discriminatory low wholesale prices that they receive. Ultimately, then they can force others out of business because of their unfair advantage, it is not cost justified. All prices are not cost justified. If you want to go there, that is good luck.

DR DURAND: There will be ample discussion on this one tomorrow I believe. It is almost five. We will stop right here. Thank you everyone for actually attending and participating. I think the group listened carefully and will probably get a lot of those discussions. I am now going to take Margaret's line that those are difficult issues. Hopefully we will grapple with some of them and there is hope and probably light at the end of the tunnel.

I guess on the econometric side of things probably Walter got the idea that we are out to get panel data among other things. The last thing I want to say is we will send you the draft transcript for you to review. Please provide corrections if they need to be made. If you want also to provide any additional submission you are welcome to do so.

We will also take any of the presentation you have provided today for some of you who have done it. If you want to touch up on those before we publish them you are welcome to do so as well. Thank you everyone.

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