

>> Pauline Ippolito: Thank you very much. Our first discussant is Daniel Garrett, Vice President at Cornerstone, so he's dealt with these issues in a litigation context and will react to our panelists.

>> Daniel Garrett: Thank you very much. I want to thank Pauline and the commission for bringing us together here to talk about these important issues and, in particular, for inviting me. I'll start with an item of housekeeping that's probably unnecessary. I think everybody here today said the word "legion" correctly. The "G" is soft. The name comes from the two founders of the company who named the company after their wives or parts of their wives names, which were Lee and Ginni. So, kudos to everyone for saying that correctly today. I will say in advance that my slides are not as monotone or as consistent as the presenters. I'm going to have to be jumping back and forth, and forgive me for that. And I'm also gonna take them not in the same order they came. So, I'm gonna start with John. And appreciated his thoughts and agree completely that theory -- the theory in this area is hard and that it is incomplete and that there's a lot of work remaining to be done here. I also agree that empirical work, I have that same sort of predilection that structural and empirical work is a desirable thing and would like to see more of that in this area. One part of the coordinated effects discussion left me a little uneasy, and that's partly because I do a lot of work on price-fixing cases, and that's the use of the word "collusion." Academic economists often use the word "collusion" to mean two different kinds of things -- one, where there's an explicit agreement and smoke-filled rooms and clearly bad social consequences, and the other, when firms are just interacting in a marketplace and, as a result of repeated games and the interaction, the parameters of interaction end up pricing at a point above marginal cost. It seemed to me that coordinated effects could apply to both of those types of "collusion," and I just wanted a clarification on that, which I think you can give me right now, if that's all right.

>> John Asker: Yeah, I am happy to include both of those cases in my comments. I don't think this is an area where sort of an explicit cartel mechanism versus a repeated game setting makes a particularly strong difference to how you would run a sort of basic empirical exercise here.

>> Daniel Garrett: All right, super. Of course, legally, if there is actually collusion, there are reasons to go after those companies for reaching agreements and fixing prices.

>> John Asker: Absolutely. Which is one of the things I find a little bit unsettling about theories of collusion. Well, coordinated effects are base theories of RPM that feel a lot like a collusion model that may well be explicit because it begs the question, why don't you just go directly after the cartel itself?

>> Daniel Garrett: That's a good point. Thank you. I'm someone who appreciates coincidences, and one of them that I appreciate is that Aviv Nevo, who was important -- is important in the literature, and one of his big contributions is in terms of ready-to-eat cereal, works at the Kellogg School of management, a connection I didn't make until just now. In your beer market, and I know beer market is just a part of the purpose of your talk, do you think that the pricing -- what you called RPM, in the context of the prices the distributors were encouraged to charge -- do you think that was more likely a minimum or a maximum motivation for that policy?

>> John Asker: I found it very hard to tell. In terms of what they're doing with the big chains, my sense from talking to the guys was it was as much just reducing transaction costs, to be honest, more than anything else. So, this begs the question of what they're doing with the smaller retailers, where they're setting a band. I have no strong opinion on that other than there's also stories. I sometimes wonder whether some kind of advertising type story might be appropriate, whereby they want to say that Budweiser, basically, in Chicago, will cost you \$2 a can or something like that and be not too far off the mark. I find it -- I thought this was a fun sort of example to throw up in front of the commission, in part because it seems to me to have so many gray areas that it sharpens the discussion a little of just where the difficulties are. I don't have good answers for a lot of this stuff.

>> Daniel Garrett: And I should also say that I admire for you choosing a topic that, for me, would merge two of my favorite areas -- empirical economics and beer. And I have been successful, in one instance, looking at the line industry, professionally, and that leads knee this comment, which is that there is a three-tier system in the distribution of alcohol in most states, and the rationale for the implementation of that, legislatively, was, as I understand it, to allow distributors, who were

making a lot of service, doing a lot of service and establishing markets, to allow them to reap fair rewards for that thing. So, it seems, to your intuition and to mine, as well, that beer wouldn't seem to be a super-high service product at the distributor level, but the motivation for the mandated system of three-tier was because of distributor service. So, let me turn to Francine. And one of the reasons I'm using first names is they're easier to pronounce here, so forgive the informality.

>> Francine Lafontaine: Guilty as charged.

>> Daniel Garrett: I want to, first of all, thank you for your work with Margaret Slade in summarizing the literature and also doing it here today. I wanted to encourage people to read her chapter -- their chapter -- of the handbook of antitrust economics, which I think is 2007 but may be 2008. It's a really good read, really carefully thought through and interesting. You make three distinctions that I want to underscore, and they've been underscored, but I want to underscore them again for the audience. One is the distinction between minimum resale price maintenance and maximum resale price maintenance. Let's not lose that, to the extent that I have any encouragement in looking at that coal bill. It's that it is explicitly minimum and is silent on maximum. Another distinction, which you make in the article, which I don't think you spoke about today is the distinction -- Sorry. That's my third distinction. The distinction you did speak about today is the distinction between voluntary and mandated vertical arrangements. I have seen in the literature and actually in public debate people talking about research results, looking at the fair-trade laws and their effects on prices and trying to apply those to voluntary RPM. And in a minute, I'm going to ask for your comments on that. Another distinction that I don't think you made today, but you make in the article, is the distinction between horizontal and vertical free-riding. So, horizontal free-riding is the classic free-riding when people are talking about RPM -- good RPM -- and that is one retailer, if it's at the retailer level, provides a lot of service and education to a customer, who then goes to a retailer who doesn't offer that service and buys it at a cheaper price. Now, that's a, you know -- I think we all understand how that can be a problem for the manufacturer, and RPM would be one policy that might solve that. Vertical free-riding is different in spirit but similar in motivation. I mean, ultimately, a good RPM is gonna be motivated because the manufacturer feels like, absent that policy, it's not getting enough service or services from its downstream dealers, and so it puts on RPM to encourage that kind of service. But it could be the case that the services

involve things that don't actually involve stealing customers from another retailer. It can be more about maintaining the integrity of the brand. For example, Lexus may have a very high level of service, and that's an important part of its reputation and why people pay money -- pay more money to buy a Lexus than other similar cars, and if you have a dealer who, for its own customers, isn't providing the same high level of -- I'm using the term "service" in a few different ways here -- but isn't providing the same level of hand-holding and "Great to see you" and that kind of thing -- that could actually impair Lexus's image in that area and affect the brand that way. So, Francine, I'm gonna have a two-part question. First of all, in your summary of the literature, there are a couple of studies that are not mentioned, and there may be a reason for that, and that's one of the parts of the question. One of them is the '83 FTC survey, which is mentioned, I think, in the coal bill. And the other one is the late 1960s D.O.J. study. I think there's a clear enough answer for that. But -- So one part is why those were not included in the article, and the other is, are studies of fair-trade laws, in your view, applicable to voluntary RPM?

>> Francine Lafontaine: So, let me start with the two studies that you're asking me about. We surveyed -- we searched through journals mostly, and so things that ended up being published in journals is what we included in these. And we also very specifically made a distinction between things that we would refer to as studies of incidence versus things that would look at consequences. And so a lot of what I saw in the more -- in these was much more incidence-oriented. So, for example, the paper by Pauline that I mentioned during my talk is in the other survey. Basically, the way we -- We had to arrange the literature -- As we got into doing that paper, we ended up facing a number of things where we had to decide, "Okay, is this about a vertical restraint or is it not? Is it about effects or is it about incidence and things like that?" And as a way to try and keep a body together and not go too crazy, we ended up creating these three buckets that then became the three papers that Pauline mentioned. So, one of them was specifically about things that are known as vertical restraints that would fit into an antitrust context and where we were looking at facts because we were trying to see whether -- what they do, and the second one was about vertical integration, and then the third one was about inter-firm contracts. So, these guys will fit more into incidence on the inter-firm contract type category, so that's why they're showing up, as did Pauline's study. So, that'll be it for those two. In terms of understanding the fair-trade laws, again, we didn't find articles that were in journals that were published on the fair-trade laws. Maybe it's a question

of going far enough back in time, but the stuff that we found in journals was we tried to cover all of that. And they would fit under the mandated version -- well, no. They would be voluntary and, in that sense, would fit under -- The change in the treatment is kind of fuzzy. It's very difficult to pinpoint. In 1975, officially, they all became -- they were all repealed, but they were kind of gradually repealed in different states over time, and manufacturers were becoming a little bit more worried about doing things. It didn't provide the kind of natural experiment that some of the other studies that we found were able to bank on, like divorcement at a very particular point in time. So, I'd be happy to look at more of them, but I didn't understand exactly -- or, I didn't see that they helped us that much at the time that we were trying to do this.

>> Daniel Garrett: Thank you. And you taught me a word -- "divorcement." Happily, I didn't just go to my wife and say, what is divorcement?

>> Francine Lafontaine: It's better not to ask her.

>> Daniel Garrett: "I've been thinking about divorcement lately." So... There was a slide in John's talk where he said what the manufacturer wants to do is let price equal marginal cost and work from there, and that reminded me that the issue is the price of what, when we're talking about RPM -- goods that are effected by RPM. If the RPM is what I call good RPM and it's done at the manufacturer's voluntary choice and it's not a -- there are no dominance kind of issues at all -- and I mean clearly good, at that stage -- the goal is to increase the level of service that retailers say provide with the good, and so the good becomes a different good. So the price equals marginal cost conditions. It would be at a different spot because the price is going to be different and the good's gonna be different and the marginal cost of that service delivery are all gonna be different. And this ties in to something that Greg said. He was characterizing two schools of thought, and that's a genuine exercise. And he used the term "reducing intra-brand competition" at one point in his talk. Other places, he put in what I think is the necessary modifier -- reducing intra-brand price competition. Because the goal of RPM, under the standard story, is to limit intra-brand price competition, but you expect and want to encourage the retailers to compete away the rents and enhance their service. So, essentially, what you the manufacturer want to do is have them raise their price or at least you're gonna give them more margin, so they price -- they're gonna price at a

certain point, you're gonna give them more margin, and you want them to spend that margin on service. So I think it's the case that, often anyway, the manufacturer's gonna want to have price equal marginal costs, just at a higher price, higher marginal cost, higher service, and that's the way the manufacturer can further its competition inter-brand. So I think it's really important that we leave in a modifier when we say that RPM reduces intra-brand competition. That's incomplete. You should say it reduces intra-brand price competition and encourages competition on service. So, my question for Greg is this. These two schools of thought that you talk about, certainly worthy of consideration, can you point us to papers where the other school of thought, the second school of thought, have put together either the theoretical ideas or the empirical support for looking askance at voluntary RPM?

>> Gregory T. Gundlach: Well, I think what we can agree is that there isn't a lot of empirical research on either side of the schools of thought. So, yeah, I think we can agree there. But to your point of what literatures describe the two schools of thought, particularly the schools of thought that encompass the notion of the complexity of retail competition, I think, at the foundational level, some of the work that Bob Steiner has done really does a nice job of characterizing the issues which were described under the two schools of thought. And that literature -- and, Bob, I don't want to date you, but that literature traces back to a considerable number of decades and has been a very consistent literature. And that literature has been followed by others, as well. Now, more particularly, I think we're all familiar with the variety of different, more specific theories for the anti-competitive explanations, and that literature is wide-varying where we talk about market power, exploitation of RPM, talk about collusion, and more recently, there's emerging literature that was discussed here at the past workshop by some of the presenters about how RPM can have anti-competitive effects, which are literally independent of the original motives for RPM, and this can take place because of its emulation by other manufacturers because it can continue beyond its productive contribution based on inertia and it can contribute to reduced and dampened price competition on the part of those who are not utilizing it. So I guess I'd answer it in that fashion.

>> Daniel Garrett: Okay, thanks. And then I think I will end with a question, and I will give up the podium. And that question is, to each of the panelists, do you feel like, on balance, given the

theoretical and empirical work on the issue that resale price maintenance should be made, per se, illegal, as congress is considering?

>> Francine Lafontaine: I begin? So, I'm going to start with the statement of I would like that to be made precise between maximum and minimum, and obviously, you're talking about minimum, but I want to reiterate again that that's an important distinction. Based on what I've seen of the evidence so far, I think that the presumption that -- and given the treatment of other vertical restraints, which are under rule of reason, my personal sense of the literature and what I've seen out there is that using a rule of reason is an appropriate mechanism to deal with minimum resale price maintenance, as well.

>> John Asker: I very much agree with Francine on this, and the more I think about a coherent regulatory approach to all vertical restraints, given their close substitutes, I actually think making a minimum RPM, specifically, a per se violation, would lead to very difficult issues in things like damage assessment and stuff like that because it means that you really have to be able to tear apart which vertical restraint is doing what to an extent which you may not have to do if they're all traded under roughly the same rubric. I'm also concerned that if we were to do per se violation, I'm not convinced that we have a body of even theoretical literature which gives a sufficiently solid foundation for a fairly aggressive enforcement stance like that, that makes the whole thing justified.

>> Gregory T. Gundlach: I'm gonna provide two answers to that question based upon my background as a researcher and my background as a lawyer. From a theory side, it certainly can be rationalized that there are theories on both sides of the case, which would lead you to the conclusion that a rule of reason, properly applied, could sort through that, and we could cure those harms and address those grievances and consumers would be better off in a deliberate, careful fashion. That's my PhD answer. My J.D. answer is, unfortunately, the knowledge that the practical realities of the judicial process and their application, as we've seen it documented in the vertical restraint area in the past two decades, has shown that these types of cases are very difficult to be mounted, very difficult to garner the evidence, and they are very, in a sense, very troubling to Plaintiffs who attempt to bring them. They just don't have the resources. The processes for identifying the harms as currently developed are very challenging. In part, that's why we're here

today. That would make me want to seriously consider, until we wrestled with and understand better how to address those issues, a per se standard.

>> Daniel Garrett: Thank you.

>> Francine Lafontaine: I'd like to add one more comment related to that because I didn't make that comment before. But one of the things that came out of some of the discussion today, I think, also, is that the theory is not very developed, but when we do have theory that suggests that minimum RPM is bad, it usually takes the form of saying it allows collusion in some way, shape, or form. And if that's the case, then the per se rule against collusion hopefully would be the right mechanism to try and go after these cases. So that's the sense in which I think that the RPM itself can be made rule of reason, but if there's collusion or evidence of collusion, then it should be looked at under the collusive rules. Okay. Sorry.

>> Female speaker: Okay. Mike, introduce yourself.

>> Michael G. Vita: I'm Mike Vita, I'm on the Bureau of Economics staff here at the FTC. I'm just gonna give some general observations that I came up with spending some time with your presentations, as well as the presentations that were done here back in February when we had the theorists come forward. So I want to sort of tie some of those things together. So, most of this is not gonna be directed at any one of you, although I may have a few specific observations. I guess that my first general observation is that I think -- and my paper showed up in Francine's -- my divorcement paper showed up in Francine's survey. So I've got my foot sort of in the academic camp a little bit and also as an enforcer. Empirical research in this area is gonna be really hard. I mean, it's going to be harder here than it is in a lot of the other enforcement areas that we do research in. And I think in particular of the merger retrospective work that we do a lot of in my group. That is comparatively easy research to carry out in that there's nice, clean events, identifiable measures of performance, such as price, that you can look at, and you have the ability to create control groups. And so you can get -- You can't say a lot about why a merger was bad or why it wasn't bad, but you can say whether it was bad or not. And we've had a fair amount of success carrying out those kinds of studies. Here, it's harder. I mean, there's no publicly available

data set on who uses vertical restraints, who doesn't, what's the nature of those restraints. And people aren't exactly going to be willing to volunteer that information. And you can see -- when you look at Francine's review, you can see that almost all of our information about these kinds of relationships has come from enforcement actions, like Pauline's study, or regulatory legislative restrictions. The divorcement stuff -- It's all cars, beer, and gasoline, you know? Interesting set of compliments there. And some hard liquor, as well, with a few exceptions. But it's not exactly -- it doesn't cover a broad array of products, even though we know RPM agreements and vertical restraints more generally -- they cover the world, right? So, we're looking over here 'cause the light's really good over here, but there's a whole lot of stuff over there in the darkness that -- it's going to be hard. It's going to be a real task for us to try to figure things out. Now, how do you do these studies, and what kind of tests do you do, and so forth, is gonna be determined, in part, what your research objective is. Now, for somebody like me -- mainly, I'm an antitrust enforcer -- I'm just -- Issues are gonna come across my desk -- "Firm 'X' is using RPM. Should we try to block it or not?" The question I'm seeking to answer, or my staff is seeking to answer, is it good or bad? If it's good, I really don't need to know why it's good. I mean, it'd be nice to know why it's good, but I don't really need to know that in making a recommendation to the commission about an enforcement action. You guys are interested -- especially you, Francine. I know your research. You're interested in why firms do particular things, what are the incentives, how do you structure things. You're interested in more than just policy questions. You're interested in how firms solve problems, how to produce output. I think, for people who want to know those things at a very deep level, it's going to be very difficult. As John has emphasized in his presentation, there's a million theories out there. Once you get outside of the conventional sort of antitrust theories -- retailer cartels and a manufacturing cartel -- you get into these unilateral theories -- why does an individual firm with market power do it? There's a million theories. I'll put in a plug right here for my colleague Dan O'Brien, who's sitting in the audience, who's written a really great, instructive literature review of the theory in there. He wrote it for a conference that was held in Stockholm late last year. Dan, is that available on the web somewhere, your study? It should be.

>> Dan O'Brien: Yes.

>> Michael G. Vita: I mean, if you just look at the tables in Dan's essay, it goes through, in very careful detail, talking about sort of the collective theories of RPM, unilateral theories and what the effects could be, and the answer is always, "It can go either way." I think that's sort of a general -- that's the one generalization, right? Even in theory, we can't really know. It's tough to know. But a lot of it depends upon what you think the counterfactual is. If you don't use RPM, what's the benchmark, set of contracts, set of behavior, to be compared against? And I'm gonna come back to that in a minute about the importance of thinking seriously about what's the counterfactual. If you say, "A firm can't use RPM," well, okay. What does it do instead? Because that's gonna be really important, not only for policy but for insights into the economics of these relationships. Okay, so, just a few -- If you're thinking about doing a study on RPM or any vertical restraint, really, what variable should you focus on? We have a tendency, I notice -- My conversations on this subject are usually with antitrust enforcers, and we always talk about price, but I think probably all these of the panelists said at one point or another, price tests aren't really very informative in this area because the procompetitive theories of RPM and the anticompetitive theories of RPM have the same implication for price. Price goes up. It goes up if it's a cartel, because it's a cartel, but if you do something to expand the demand for your service and your firm with some market power, which is basically any firm that's gonna use these things has some market power, demand curve is gonna shift out. The equilibrium price is gonna go up. If you're producing more services or a higher-quality product, same thing -- price is gonna go up. So looking at prices is not very helpful here. You really need to look at outputs. That's hard. It's hard to get data on outputs. There's some areas, like I did the gasoline study -- You can get evidence on prices, and that was okay, I think, for the study that I was doing, but if you're looking at some privately adopted restraint -- I was looking at a government-imposed restraint. Look at something privately adopted, you really need output tests. And if you can't get outputs, try to draw inferences about the welfare effects of these contracts is gonna be hard. Okay, so there's a million theories out there. Well, what theories should we want tests? Well, again, I'm an antitrust enforcer, and so, I think, the theory that's most important to us, the thing that we worry about most in antitrust is collusion, okay? So the manufacturer-cartel theory or the retailer-cartel theory is what you want to look at first, or what I would look at first, okay? So, if you're sitting down and trying to make some sense out of trying to figure, "Okay, what's this RPM agreement do?" the first thing I would do is actually, before I started running any regressions or estimating any demand function on these, look at the competing

products of the -- Look at the firms that are using RPM, who compete with one another to find out, do they satisfy the merger guideline's smallest market principle? 'Cause remember, that's not merger work. Remember, that smallest market principle is all about the smallest group of firms that can effectively collude. That's the idea. You keep adding in firms into that. When you're doing a merger analysis, you add firms -- you add products in there until you get to the smallest number of firms. And if a monopolist controlled them, he could profitably raise price. If we're talking about an actual cartel, which presumably is one of the theories that we're looking at when we looking at RPM agreements, it has to be the case that the colluding manufacturers, or putatively colluding manufacturers, there's enough of them using RPM to satisfy that test. So, if we're looking at, like, the Legion case, if that was given to me as an antitrust economist to try to figure out, "Okay, is this good or bad? What's Legion doing?" I'd want to look at what all the other handbag manufacturers were doing. If they use RPM, if they don't use RPM. I can knock that theory out right away. It's got to be something else. I mean, it might be something bad. Might be a retail cartel. It's not a manufacturer's cartel, okay? So, that's the first thing I'd look at. Second thing I'd like at, then, is to see if the world's provided us some nice natural experiments. Now, here, we used -- We've used those very productively in our merger retrospective work here at the FTC. I'm not so sure it would work as well in analyzing things like RPM agreements. Francine talked about if you're a firm, you're doing business certainly nationally, maybe internationally. You can't be varying your distribution policies state by state. Maryland, for example, just made RPM illegal. I think that's what happened. Well, my guess is a manufacturer's not gonna have two different policies, one for Virginia, one for Maryland. If you live in this area, you don't want to drive into Montgomery County and find out it's a totally different way of doing business there than it is in Virginia. So I don't know how productive that's gonna be. But the third thing I thought of, which John alluded to in his presentation, there's this literature looking sort of at the modern theory of collusion, collusion taking place -- Tacit collusion. I should be explicit. Where firms are interacting in a repeated game setting, and there's repeated price wars because you can't collude perfectly. There's demand shocks. There's trigger price strategies that are used to enforce the collusive agreement. And, you know, a thought or a suggestion I might have is, if you looked at firms using RPM and you had a sufficiently long time series, whether you could use some of the empirical techniques, like Glenn Ellison and Rob Porter in some of these papers on detecting collusion -- tacit collusion -- to try to identify whether that would come out in the data. That would

be one way, actually, to look at price data, perhaps, that might inform you about, was this collusion? Was it something else? Just a comment about theories that I think are just sort of inherently untestable, and this is a comment, I guess, directed a little bit at Greg and also some of the panelists who spoke at the February RPM workshop. This was in your written comments, Greg, but you did mention, I think, at the end of your presentation. There's this notion out there that there might be -- that RPM might be used to promote products but promote it in some welfare-reducing way. So, you're a manufacturer. You use an RPM agreement. You do actually induce the retailers who are carrying your product to market your product more intensively, sell your product more intensively than it does rival products it carries. And you suggested that that could happen and it could be welfare-reducing and that's something that we would want to look at. When you have a chance to respond to my comments, I'd like to know. As an antitrust enforcer, I have no idea how I'd ever test that theory. If I actually saw a manufacturer using RPM, and it actually seemed to have a welfare-expanding effect, I would consider that my job would be done. I'd write my memo and say, "This is efficient. Let's move on." But, you know, you disagree with that, or I think you might disagree with that. So, what would you tell me and my staff we should be looking at to try to figure out if that use of RPM would fall under the category of output-expanding but welfare-reducing use? And I guess, sort of a second thought on that is, what's the limiting principle on that? Because if you can't use RPM to induce the provision of retailer service to expand your output, is there anything else you can use that also wouldn't be equally objectionable? And I'll get back to this when I get to my point about what's the counterfactual. When you're saying you can't use RPM, what's the counterfactual? What are firms going to use? What kind of agreement should we, as researchers and policymakers be analyzing, to try to get a handle on RPM in the post-Legion world? I think we're all clear what we want to look at are privately adopted, privately enforced agreements. Not so much today, but in the earlier February session here, there was some discussion about some evidence from Europe on things like the French La Galande root laws and the British Net Book agreement, RPM arrangement they had for decades over there, and some of the panelists at those sessions thought that those -- the observations that we could glean from looking at those arrangements might tell us something about privately adopted RPM agreements. I really don't think that's right. I think those are great studies, I think they're very informative, but they're not informative about the problem that we're facing here in the U.S., in the post-Legion world. Just for those of you who might not remember what I'm talking about, in France -- Patrick

Rey talked about this in his presentation -- they have a law that basically imposes -- it's a sales below cost law, as we'd call it in this country. It forces every manufacturer and every retailer to adhere to minimum sales below cost. So, the invoice prices, the cost of a good, you can't sell below that, and if you do, it violates the law. It's enforced by government penalties. We have -- At the state level, we have laws like that in this country, and it applies to things like gasoline and I think a few other products. And I think most of our priors would be -- those are bad laws. And I think the studies that have been done are very good studies. They confirm our intuition that it's a bad idea to have the government setting minimum prices, but I'm not sure they really tell us all that much about what would be the effect -- what's the effect of Legion using RPM when it sells its handbags to a variety of different retailers. My last point -- specifying the counterfactual. John had made this point really clearly. Most of the time, retailers and manufacturers are using several vertical restraints. And if you try to identify whether it's from a policy standpoint or from an academic standpoint, what's the effect of RPM holding everything else constant on prices, outputs, welfare, something like that? That's actually a pretty hard question to know if you're looking at real-world data because -- especially if your data's coming out of some sort of enforcement action, where the government says, "You can't use RPM." Well, it's not going to be the case that the only thing that happens is the firm stops using RPM and then doesn't do any more adjustments. A really nice study on this point -- it's forthcoming in the Journal of Law and Economics. It's a paper. It's called "Vertical restraints and the law evidence from automobile franchising in Europe." And the author of that paper looked -- there was a 2002 European regulation that prohibited the use of dealer-exclusive territories. Okay, so what did firms do? Well, it turns out the franchise contracts between the dealers and the manufacturers changed very substantially in the aftermath of that. The manufacturers adopted price ceilings, standards on verifiable marketing and service inputs, and imposed quantity floors. So there was this big adjustment to it. So they couldn't -- Whatever they were trying to achieve through the use of exclusive territories, once that was banned, they adopted a bunch of other things. This paper doesn't look at prices and outputs, but if you were to look at prices and outputs, sort of before and after, in that environment, you might draw a really mistaken inference about what's the effect of exclusive territories. You might find no effect at all because it might turn out these other provisions were a really ineffective substitute for it. So, as we go forward, whether as policymakers or academics, we really have to keep that in mind. It's never gonna be just a nice, clean test -- *ceteris paribus*, take out the RPM, and everything else stays the

same, and figure out what "RPM" means. It's gonna be hard. I probably used up all my time, so I'll shut up and let you guys respond.

>> Pauline Ippolito: Got consistency, at least. Okay, I guess I'll just say a couple of things responding to some of those comments, and then we'll go back to the speakers. I also agree that it's very important, as we look at the empirical evidence, one of the key challenges in this area is finding natural experiments that can be used to measure something. And the primary place we find those natural experiments is when laws change. But if a law is in place, then it's a vertical practice. It's typically mandated on the entire industry, sometimes with public enforcement, and then that's removed. That's much closer to the bad-guy stories for RPM. Everyone uses it, everyone has to use it, there's strict enforcement from outside forces. That has more potential to give you a super-competitive pricing structure than a voluntary practice which is constantly subject to challenge by some other manufacturer who isn't gonna use RPM. If manufacturers use RPM to raise prices above competitive levels, there's always the threat of entry by someone who isn't in the cartel. So, in looking at the evidence, it's really important to keep in mind, "What is this evidence coming from?" And if it's a coordinated, mandated use, it's a different thing than the unilateral uses. And I'd like to follow up on one thing that Greg said. In going over the RPM stuff, I went back and read Jesse Markham's study, done in 1973. Jesse Markham was an economics professor at the Harvard business school, and he and another -- I think a graduate student or young faculty member -- tried to look at the Rhode Island experience when they abolished fair trade, and they couldn't get good quantitative data, it turned out, because Rhode Island is too small, and everybody's distribution systems had part of southern Massachusetts and part of Connecticut in it. And so he ended up mostly interviewing all the C.E.O.s, he interviewed all of the people who had run the fair-trade program, he talked to all the wholesalers in Rhode Island -- and Rhode Island being small meant you could talk to all the wholesalers in Rhode Island -- and he talked to a whole sampling of retailers. And if your allergies don't go crazy with the moldy copy you get from the library, as mine unfortunately did, it's a very interesting study because it anticipates a lot of the serious theory that has come since then on the kinds of services, the reasons they wanted the practice, what happened as they laws changed and firms were forced to abandon RPM. The nine cases he was looking at were hardware and houseware companies. And one of the surprising findings, for me, having been in this debate for some time, is that, of the nine, only four had price changes in the

expected direction. The others didn't. And all of the five that did have price changes, were direct distribution, so they were dealer contracts directly with the manufacturer and the retailer. And so the manufacturer had lots of other ways to shape the interaction with the dealer, which is a theme we've heard today from several of our speakers, that if you can't do RPM, you can do exclusive contract, you can do bonus payments, you can do two-part pricing, you can do all kinds of trade promotions. So, it isn't a "you take RPM out and nothing else changes, necessarily." So, anyway, enough from me. Any comments from the speakers reacting to the discussants? John?

>> John Asker: I actually wanted to make a somewhat more general comment, but it builds on a thing everyone said, which is one of the difficulties here is just data availability. In work I've done related to cartel activity, I've found enforcement agencies to be incredibly helpful in providing data that just wouldn't otherwise be available because they've had access to things in the course of investigations which I would never dream of being able to get on my own. So, I think there's hopefully some scope or opportunity for when data that can be made publicly available comes around, for being active in sharing that with the research community in the hope of getting some useful answers back.

>> Pauline Ippolito: Well, even beyond that, we have subpoena power for study purposes.

>> John Asker: Which is a very good point.

>> Pauline Ippolito: Of course, the practice has to happen for us to be able to study it. But, yes. Greg?

>> Gregory T. Gundlach: I really have two comments, and one reinforces, I think, what has been said by John, Francine, and Pauline and myself, and Michael commented on it, and that is, the first being that, sure, empirical research is tough. And I think we all agree. I think there's some subtlety here, though. As Francine pointed out, there are different ways of gathering empirical data. And I think we need to cast a very broad net here. The type of empirical modeling a kind of metric modelling that John was talking about, while providing valuable information, has its challenges. But at the same time, there are other ways of knowing -- other ways of approaching this. When we

look back at the studies that have been conducted, Pauline's study involved what is considered almost an event study, in the sense that it went back and looked at critical cases, cataloging content, analyzed them. Francine talked about the "Harvard Business Review" article, early research, that did a lot of qualitative work. And John had mentioned we need to get out and talk to managers, talk to retailers, and understand how they are going about what they are doing and does it parallel what we are thinking they are doing, as it relates to resale price maintenance and more broadly the explanations for it. There are also more systematic approaches for that, using manager surveys. There are a lot of consumer questions here, in terms of how consumers behave in the marketplace as it relates to these theories and consumer surveys and studies, including experiments, are a valuable way of understanding. I would hate for us to go forward and say, "Gee, we can't do an econometric study, and therefore, we're just gonna default and accept all this theory." We need to approach this in a very eclectic, innovative, novel, creative way too further understanding.

>> Pauline Ippolito: I'd second that. I mean, it's very difficult in this area to do frontier-level research. We at the agencies have struggled with that for a while. And if you do these other qualitative approaches, they're easy to attack. Absolutely. At the same time, "Compared to what?" is always your question. And a sincere, clear, and clearly documented effort to gather information from a variety of sources is often illuminating and helps point the direction for other more quantitative approaches, so I agree with that. I mean, when I did the -- I did a review of all of the RPM cases for a certain period of time, so every private, every public case, and I went through and tried to categorize the goods as simple or not simple and so on. And you know, I could easily attack that paper if I was the discussant of that paper. At the same time, it's gotten an incredible number of sights because it's the only information that was collected systematically to try get a picture what could be going on here. What kinds of cases are we talking about, and when do they occur? And so, you know, I would like to do better. I think it would be nice to move forward, but for something that's illegal, it hasn't been possible till now. If we get -- If the practice really goes forward and we start seeing more firms using the practice, it really would be useful to then study the markets where some of the firms are using the practice and some of the firms are not using the practice and try to disentangle how costs have changed, how marketing has changed, and what's happened to prices and quantities. Absolutely.

>> Gregory T. Gundlach: Absolutely. Anyone who's in the field of research knows that any study can be picked apart, whether it's an empirical, an econometric model or a consumer survey or a classic experiment.

>> Pauline Ippolito: Now, one thing I'll just say, though, in terms of -- sometimes we have advantages, but sometimes you have advantages. Business school professors can get corporate executives to sit down and talk to them, often pretty frankly. If we from the government show up and say we'd just like to chat, we don't get anything. Their lawyers are by their side.

>> Gregory T. Gundlach: Well understood. Let me talk specifically to Mike's point, in terms of this notion of output tests, because I think that's where the focus was, and I'm still wrestling with this in my mind myself. But I understand that many economists place a lot of emphasis on output tests and look at price tests as something that's ambiguous here because of the fact that the theories themselves predict, on both sides of the coin, that prices will go up, both to achieve a procompetitive outcome, as well as an anticompetitive outcome. So the question becomes, do output tests similarly have the potential to create an ambiguous outcome, or could you have a circumstance where the output actually goes up but somehow consumers have been harmed? And I think that was your question.

>> Michael T. Vita: Yeah, right.

>> Gregory T. Gundlach: And this is where, in preparing for my remarks here, I began to think about this first round versus second round notion. And I think the question gets at that. And it has a lot to do with the idea that, if you think about it this way, that, sure, RPM, if it does what it's explained to do on the procompetitive side, it will cure those principle Asian problems, encourage retailers to promote their product, assuming consumers value those promotions, consumers will find them attractive -- that product more attractive and they'll buy more. Output enhancement. That's round one. What about round two, in terms of understanding? So now you have consumer harm, or, rather, you have output that's gone up. Is there the potential for harms beyond that? And consider a couple of scenarios, and these are the types of other anticompetitive explanations that are being entertained in more recent literatures. What happens now if that RPM that was output-

enhancing created a race to engage in RPM by all the other competitors? And so now we have a race that goes on amongst the other competitors all adopting RPM, and at the end of the day, is that beneficial or is that potentially harmful? Consider another scenario. Consider a scenario where, when that RPM is instigated, the retailer now begins to push those products in ways that are not beneficial to consumers. They're, in effect, engaging in deceptive sales practices because they know that they are going to be able to garner the increased price profit margin from that uniform price from the RPM. Does that have the potential for harm? Consider also the idea that that race and that pushing that might occur could create some inertia within that market such that, in the subsequent rounds, and I'm not using game theory and suggesting a parallel here, but just trying to think in terms of a temporal dynamic, is the fact that you could have RPM continuing down the road in ways that continue beyond its utility, given the original justification? And we know that there are circumstances where we don't know, but there's been conjecture or there's circumstances when RPM may be used in an industry and continue to be used because managers are fearful of letting it go, will have adverse consequences for them within the retail marketplace. Now, that's on the edge of my mind. I don't know if those subsequent rounds result in harms in the way that antitrust defines harms, and I would think that it's allocative efficiency, it's innovation, it's choice, all those things. But those are the types of second-round temporal issues that might create a scenario where output was increased to begin with, but subsequent to that, things didn't quite work out that way, in terms of the harms.

>> Francine Lafontaine: So, if I might just make a few comments in reaction to all of this, as well, but very short. A couple of things. One of the points that Mike made, which I think somewhat gets at some of what was just mentioned is the idea of looking at what competitors do when one firm -- and, actually, of the studies that I can recall, when it comes to -- one was about stock-market effects, for example. Gidigen had this study. And it's just looking at a firm that started doing RPM, but it doesn't really look at all at how the other firms reacted to that. Now, if consumers -- the theories that Greg is pointing to have to do with consumer originating and all of that, and if one manufacturer puts in an RPM which leads retailers to then push the product in bad ways or to offer services that consumers don't value, potentially that gives some leeway to another manufacturer of a similar product to approach the problem differently and not do the RPM and, therefore, achieve -- compete with the one that has put in RPM and maybe alleviate some of the negative effects of that.

But what this means is that thinking of this, in terms of competing firms, is important, and that's not been done much at all that I can recall. The other thing that has come up is Maryland has now put in a law that says that minimum RPM is per se illegal, if I understand correctly. So we are moving in a post-Legion world but not completely. As I mentioned, at least the couple people that I've had occasions to ask, "How come we don't see much more RPM maximum, in particular?" In my case, their answer was, "Well, we're not so sure that it's something that we can do across the different states in all impunity, completely." First, it's rule of reason, and, second, you know, maybe some states will still present problems for that. So, there are two ways to look at that. One of them is to say, "Okay, so that means we're not going to see RPM increase or go down. There's going to be a lot of constraints on the occurrence of RPM. The alternative is maybe that will provide some natural experiments. In some places, it's more feasible than others, and companies that mostly deal in those areas may not feel like it's too complicated to have different rules in their area, relative to other things. So maybe there's some opportunities for research there, as well, if we have differences across states. And so I'll just finish with reiterating this point about data. I think that there are definitely benefits to trying to find a way to have the data that you guys can -- that can be obtained by agencies, moved over to people who might spend much more time digging in to it, as John was describing, and definitely have businesspeople and sociologists within business schools and all of these types do more of the more descriptive, survey-based information type thing and really think about this as an industry problem rather than a firm by firm problem.

>> Pauline Ippolito: Well, I think especially marketers, Greg.

>> Francine Lafontaine: Yes.

>> Pauline Ippolito: I mean, fundamentally, many of the efficiency explanations for individual uses of RPM are really to generate marketing services. And there are other ways to generate marketing services. The world doesn't end with no RPM, as we've all seen all these years. But it's really the marketers who have the feel for what are the firms doing and why are they doing it, why do they think it's important, if they do think it's important, and how are they gonna substitute around it if they can't use it? And, at a descriptive level, it is interesting to hear, though. It'll vary, surely, by industry. It's a different thing if you're selling major appliances, as opposed to other

things -- toothpaste. In terms of Internet free-riding, I'm a regular Internet free-rider, it turns out. Unfortunately, one of the places I constantly free-rode on was Expo -- Home Depot's Expo. They'd have great showrooms. You could see all of the things arrayed. They'd have more variety. And then you go on the Internet and buy it. But they've just gone out of business. That's unfortunate.

>> Gregory T. Gundlach: You're not describing free-riding there. You're describing free-riding within the Internet?

>> Pauline Ippolito: No, no. I could go to Home Depot and -- Yes, you can free-ride the other way, as well. Absolutely. Absolutely. But having to see it and touch it is something that the Internet can't do. You can see it -- you could see a small picture of it, but you can't really see it to say -- just to get that sense of the quality.

>> Gregory T. Gundlach: I'd relate a quick experience. I know we're running out of time. I recently bought a car off the Internet.

>> Pauline Ippolito: Oh, wow.

>> Gregory T. Gundlach: And I found that I had more information from my experience at the dealership online than I had waiting for a salesperson who took forever and walked me around and tried to sell me cars that they had too many of and not the car that I was interested in. I had all the specs, all the information very readily available to me on the Internet.

>> Pauline Ippolito: Absolutely. And the firms are really using that to fill in for information that you'd have to try to tease out of the dealers. Yes. Bob?

>> Bob Steiner: Couple of things to say.

>> Female speaker: If you would excuse me...

>> Pauline Ippolito: Excuse me?

>> Female speaker: His name, please?

>> Pauline Ippolito: Bob Steiner.

>> Female speaker: Thank you.

>> Bob Steiner: From what you had to say, I wrote an article years ago in which I used the example of cough medicine that Dr. Green decided to invoke with RPM, which he did. And the price was raised, but his output was raised. But then Dr. Brown's remedy and Dr. White's remedy and all these other people also adopted RPM, and finally the price was higher but the demand became less because you could only buy one medication for cough problems, and so there was no way that any of the manufacturers could get out of that without -- They all wished they hadn't entered into it in the first place.

>> Pauline Ippolito: But why wouldn't someone have an incentive to lower price and eliminate that? Because of the retailer, the concentration?

>> Bob Steiner: Well, I think you have to have a retailer that was a more efficient kind of retailer, and I think this was a theme that was in here today. But I think, historically -- and Shopater talked about this -- one of the real problems with vertical restraints are the fact that they were used historically to prevent the development or growth of more efficient forms of retail. I found that out in the toy business when discounters started. And, of course, we adopted RPM, not because we wanted to -- we loved to have our toys sell for less -- but because we would lose 80% of our dealers. So the calculation was very simple. But probably, this was very efficient. Socially, when you looked at the industry, it was inefficient because -- And then when the discounters grew a lot, why, we suddenly rushed over to sell to these people who tried for years to prevent that ever occurs. I also want a few other points. One is that, as enforcers, I think you have to look at whether you can be effective. It seems to me that there's no remedy for a vertical restraint adopted by a weak firm, but because only the dealer will simply substitute another item in its place. And you have to have a strong firm with a very large consumer franchise. When they adopt vertical

restraints or RPM, that act can do considerable harm. And you can measure that in the total sequence of the industry's economic framework. Finally, I want to say to the FTC that you have adopted a ridiculous proposition in the literature, which is the one that is inter-brand competition. It is primarily government retailer margins. How can you possibly accept something like that? Inter-brand -- He looked at firms, he looked at the apparel business. There were 5,000 women's shirt manufacturers. Could inter-brand competition be any more severe? Then, of course, retail gross margins were very high, and there were no penthouses over at the 7th Avenue garment district. The manufacturers were very -- made very firm profits. And you get the inverse association between margins at the two levels. Now, intra-brand competition is what holds down retailer margins and inter-brand competition is a secondary fitting that occurs when once a competitive item in a certain category has its price reduced by its competition in the same store, then that would be effective. But the key idea that's in Alfred Marshall, "Industry and Trade," and it's in Neil Gordon's book, which is the best book still on the consumer-goods economy. He was a marketing professor at the Harvard business school. It's called "The Economic Perfection of Advertising." But if you know that two stores are selling the same thing, that's intra- and it's a very popular brand. Then you can't, as the dealer, mark that price up. At a time of Barbie doll or another thing in store "A" and store "B," you know they're the same, as the consumer. That's intra-brand competition. Inter-brand competition can never rise to that level because it's always competition on differentiated items. Colgate toothpaste and Crest toothpaste. They compete with each other, but one is higher in the store than the other one. But the consumer says, "Well, it might be better quality, it's got good attributes. Maybe the store just wants to mark it up. Unh-unh. That doesn't govern retail markets. It's only competition among very strong brands that's it's identical across stores. And the FTC parroted that inter-brand competition thing from the decision. There were a bunch of others earlier that made this provision. So you should get that straight. The other thing is, I don't want to be a stockholder in any firm that prices at marginal cost. How in the world can we price at marginal cost and make your recurrent fixed cost every period that you have that don't vary with output? How in the world are you gonna cover those and stay in business?

>> Pauline Ippolito: Long-term marginal cost. Thank you, Bob. Anybody else? Yes?

>> It seems like --

>> Female speaker: I need a name.

>> Pauline Ippolito: Name, please?

>> Sorry. Mark Taburn. It seems like with generating marketing services or promotional services is the main rationale for adopting RPM. It seems like a pretty inefficient way, in the long term, of actually getting those because it seems to me that some retailers are going to do the promotion, that people who are gonna be the free-riders are still going to not do the promotion, and they're not going to get a wider margin.

>> Pauline Ippolito: No. One of the unstated presumptions in that statement is that there's manufacturer enforcement with threat of termination. Otherwise, the story doesn't hold together. Yeah. Absolutely.

>> Your Internet seller's still gonna not promote, but they're definitely a larger margin in the long term.

>> Pauline Ippolito: Yes. Laurel.

>> Laurel Price: Laurel Price.

>> Pauline Ippolito: FTC.

>> Laurel Price: Most of the studies you've talked about have been beer, gas, and cars. What happens in the modeling and evaluation of effects in a market where inter-brand competition occurs on the opposite sides of the same aisle in the same store? Essentially the multi-brand distribution chains.

>> John Asker: This is an issue which came up in that beer study 'cause obviously you buy different brands of beer in the same aisle. Let me just run through that. In terms of getting a

demand system normal, we know how to do that. That's all that differentiated product stuff that was done in the late '90s, for the most part. Then -- So, is your question about the empirical implementation or is it about the sort of how much the theoretical models change?

>> Laurel Price: Both.

>> John Asker: Oh, right. So, condition on having a theoretical model that makes sense, I think the main issue is just being able to deal with estimating demand for differentiated products. If you're talking about a supermarket environment, then you run into issues which Greg can probably talk about better than me, like starting fees and all of that good stuff. You know, by saying we know how to deal with differentiated demand situations and the estimation of them, I don't mean to in any way downplay how hard I think that is and the degree of exogenous variation that's needed in the data to correctly identify elasticities in that environment is, when you actually sit down and think about it, very, very, very demanding, to pardon the pun. When you read "BLP," for instance, which is a wonderful paper, they've pick a market where there's really visceral differentiation on a product which is a significant proportion of our income, where we're really gonna pay attention to the different --

>> Pauline Ippolito: To save cars.

>> John Asker: Yeah, this is a study -- there's a paper called "Equal Agreement in the Automobile Market," where they're looking at estimating a demand curve for cars using data that runs over 20 years. Yeah, when you buy a car, it's a huge part of your income that you're putting down, and you're going to pay a lot of attention to the difference between a Lexus and a Honda Civic. It's not clear that when I buy cereal I'm sort of feeling the differentiation to the same extent, and that's largely the source of why it's quite difficult to get exogenous variation in a supermarket situation that makes me really believe the elasticities that come out of that without some either micro data or really good instruments or all of that stuff. That's what I think is the main issue there. The other issue, actually, is if you're going to use a model like that to run counterfactuals, the computational resources that you need to execute that can be actually fairly significant because the surface that you're looking to, say, recalculate prices over can be very bumpy and have a lot of flat-bids in it,

and I apologize to the lawyers out there for this language. But what that means is that if I was going to run something like that using a model of the complications that I'm thinking about where we're lucky enough to have a 512 processor, high-performance computing grid which we can borrow from the physicists, and that's where I would shoot this thing. So that that actually will be particularly germane to, say, the FTC, using these kinds of tools, because you guys have the unfortunate proclivity of being under time constraints from time to time, which I sort of am not. On the theory side, I'll defer to my theorist colleagues.

>> Francine Lafontaine: I'll just say one little thing about this, and it has more to do with one comment that came up several times is that resale price maintenance is used with other things, very often. One of the advantages of a situation like the one you just described is that at least you don't have exclusive dealing, that you can rule out that one, right? But aside from that, you can still have two-part tariff tying and things like that. But it again kind of brings up the fact that if you're doing beer and you knew all of the competitors and you can do some things in that market because they are sold in the same store as opposed to cars and other things that are not.

>> Laurel Price: Yeah, but in terms of incentive alignments, for instance, if a manufacturer looking at a marketplace where all of my competitors are sold in the same outlet mine are sold in, are my incentives in terms of my dealing with the retailer more aligned with those of the retailer or with the consumer? Because the retailer now has a gatekeeper function.

>> Francine Lafontaine: I would defer to the theorists on that one, as well.

>> John Asker: What I suspect the answer is depends very much on all sorts of institutional things in the industry.

>> Francine Lafontaine: Whether there's full-line forcing going on, whether it's these guys that go and take care of the retailer shops --

>> Pauline Ippolito: Category managers.

>> Francine Lafontaine: That's right -- category managers, if that's the way that that particular product is sold. So, a lot of institutional detail, which, again, would be really interesting to know about and which, again, also brings up the important fact that you need to look not only at this manufacturer but that one and that one and that one at the same time.

>> Pauline Ippolito: Commissioner Harbour.

>> Pamela Jones Harbour: Yes, I'd like to follow up on Bob Steiner's comment. It sounded to me like you were talking about the Sylvania dicta, where Sylvania said inter-brand competition was the more important form of competition, as opposed to intra-brand competition. My question is, is there some way to model this theory empirically to test that assumption? Since we're looking at everything in this area, could we not add this to our bag of tricks and look to see if that dicta in Sylvania, which has been cited since 1977?

>> Pauline Ippolito: '77.

>> Pamela Jones Harbour: ...repeatedly. Can we test that to see if inter-brand competition is really more important, in favor, than intra-brand competition? And how would we do that? I'm asking our empiricist here? How would one go about doing that? You have to model that.

>> John Asker: Why don't you start?

>> Gregory T. Gundlach: I would echo that -- and I'm not going to be able to answer that question. The modelers will be able to do that. I think there are ways to look and see the relative contribution of inter-brand versus intra-brand competition on the ongoings of what's happening at retail. And Bob's work, I know, has focused on margins and looking at various things, and he can explain that, but the only comment I want to make here before I turn it over is that we're back to those foundational differences between two schools of thought, and I think that it is imperative that we do that. The idea of alignment of those interests in terms of the factors that can dissipate that assumed alignment on the one school of thought, and now we're talking about what is the best form of competition which is that other dimension that we talked about earlier.

>> John Asker: I think there are probably a bunch of simple things you can do. So, for instance, just looking at the relative size of the mark-ups, at the retail and the manufacture level, can probably give you a lot of insight on that question in a very simple "just look at the data" kind of way. If you want to actually get magnitudes of how big are the relative demand elasticities, or something like that, I apologize for skipping a slide which speaks to this issue.

>> Pamela Jones Harbour: For the record, please tell me, what slide is that?

>> John Asker: It's the slide which, you'll remember, I have in a deck, wherever that -- Did I leave my deck up there? Can you pass it this way? Oh. There's a slide towards the back which is the second slide, which has the title "Problems Arising from Data," and the first line is "Research question -- no free-riding." And then there's parts A, B, and C, with the two positives being bolded. This is the -- probably the third or fourth to last in the deck. It's a slide which cites, among others, work by Howard Smith, Ralph Tomatson, and Michael Katz, who's not the Michael Katz you're thinking of, who was a doctoral student at Harvard in 2007. What these guys do is look at consumer's choices as to where they shop, in addition to what they do once they turn up in the shop. So, in some sense, this is, if we were to think about a market in which each manufacturer had a separate store, this is getting at your issue, really, which is, do I just go to all the same stores that is providing the one product, which means there's intra competition, or am I going to different stores that are providing different products, which is inter competition? Clearly, if we're talking about supermarkets, then things are gonna get more complicated, but this is the right place to start. One of the problems about incorporating the idea of where you go shopping, in addition to, "What are you gonna buy when you get there?" is that you need to articulate, to sort of estimate things very precisely, exactly what people would have done at the stores they would have gone to if they hadn't gone to the store they would have gotten, how happy that might have made them. Right? That's kind of hard. The reason why I think it's instructive to read Michael Katz's PhD thesis and why it's cited here, and if you want a copy of it, I've got an electronic copy on my computer, is what he does is he uses some very recent econometric tools which essentially get around that problem, which means that we don't need to have a very, very strong theory of what people would have done in stores we don't see them going to when they're buying stuff they didn't buy, which is sort of helpful.

So, that toolbox, together with the toolbox which I've talked to a little bit previously, which is, given some scanner data or that kind of mandate, can we estimate demand curves for differentiated products markets? I actually think it's very feasible. It's difficult in the implementation sense, but there's nothing conceptually problematic about getting hold of some data for industries that you're interested in and just working out what all those cross elasticities look like. We can do that, unambiguously. It'll take a little time, but we can do that.

>> Bob Steiner: To give you an answer, what anybody in business knows is that brands with very strong consumer franchises where intra-brand competition is high, they have high margins and retailers have low ones. Brands that have -- In an industry with brands that have very little market power, the margin relationships are reversed. And just a simple... An industry where consumers are more likely to switch brands within the store rather than the stores and a brand then the industries, the retailers will have power in the mark-up. Retailers can play one manufacturer against the other. In any experience where the opposite is concerned, where consumers will switch stores within brand, should the store not carry an item or not price it competitively, in those industries, the advantage of reverse association between margins and the retailers... This doesn't say what the welfare act on it is because you have to look at costs and all the other things. What it does tell you, at least, the kinds of industries that are determined who's gonna have the high margin and who has the low. And this is the fact that manufacturers and retailers have a competitive dimension, not just as sales. They're all partners. As a manufacturer, what you want to do is beat down the margins of your suppliers so you get a lower invoice cost and beat down the margins of your retailers so you get a higher portion of the consumer price, and when you do those things, you apply for, believe it or not, horizontal competition. This is vertical competition. You're buying for less and selling for more than your competitors, and you can do that when you get horizontal market shares.

>> Pauline Ippolito: Okay, any other questions? Greg?

>> Gregory T. Gundlach: Pauline, just to add to that, what John was talking about, looking at consumer shopping behavior, in a sense, modeling that, another way to think about it, too, in a more eclectic way is let's ask managers who they worry about more -- competition from other retailers or competition from other brands? And I know Rob, or, rather, Bob has cited a quote in a

number of his publications, the part of -- is it Rob Walton who talks about -- that they worry much more about store competition than they do about brand competition, if I'm quoting that correctly.

>> Bob Steiner: He said that if the manufacturer's price is larger, in terms of the market power, the buying power of the retailer, which is vertical, upstream competition... And this was in response to the former chairman of the FTC said that all competition is horizontal and it can only be rebutted by other horizontal influences...

>> Pauline Ippolito: Well, maybe we should just end it there. Thank you all very much for coming. Thank you.