This transcript has been lightly edited for clarity

AFTERNOON SESSION

(12:00 P.M.)

LUNCH PROGRAM: ECONOMICS COMES OF AGE AT THE FTC

SPEAKERS: JONATHAN B. BAKER
LUKE M. FROEB
DAVID T. SCHEFFMAN

MODERATOR: PAUL A. PAUTLER

MR. PAUTLER: Welcome back to the FTC's Celebration of its 90th birthday. At this lunch session, we're going to have a number of eminent economists speak. In your program you'll notice that Luke Froeb is going to be the moderator, but since he wanted to say so much, it was inappropriate for him to be the moderator, and so I've taken over that role briefly.

I just wanted to give a quick introduction for our three speakers today. Dave Scheffman is our only two-time ex-FTC Bureau of Economics (BE) director. He was director from 1985 to 1988, also from 2001 to 2003. He's an adjunct professor of business strategy and marketing at Vanderbilt University and is currently working with LECG.

Dave will start us off and then speaking second will be Jon Baker who is also a former BE director from the 1995 to 1998 period. He's a professor of law at American University's Washington College of Law, and like a lot of good FTCers, he's been here before. He was here during the 1985-'86 period when he worked as an assistant for Commissioner Calvani, and so both Dave and John are two-time FTCers.

And speaking third will be our current bureau director, Luke Froeb, who hasn't been at the FTC other than his current stint, but he was, of course, at the Department of Justice before as a staff economist, and he will be going third.

So, to start off, Dave?

MR. SCHEFFMAN: Thank you, Paul.

In my own mind, I've aged enough so that I've gone from being merely obnoxious to an older curmudgeon, and that allows me to prattle about metaphysical issues which I'm going to do a little bit today before the serious economists start.

On Metaphysics: I think the title of this session (Economics Comes of Age at the FTC) is very interesting. I don't know who arrived at the title, I was thinking what does this mean? I think as an economist, it means, we may have thought it meant, well, we're at the central stage of the FTC, which is not true. We have become more important over time and I'll talk about that, but I think "coming of age" means that economists and economics have become important enough to the FTC that we have to play by the same rules as everyone else, that is within the legal system, and that our opinions have to be vetted in the same way, not just by economists, but by judges and lawyers, and I think the economists are still learning the reality of playing in that game rather than playing in a game with just economists, which most of us do in our professional life as economists.

There have been lots of accomplishments by the Bureau of Economics. We had a whole soiree last year, the 100th anniversary of the Bureau of Corporations, where those accomplishments were discussed and we sold it, it's on the website and you've heard a lot about it. Of course in my view much more of this 90th anniversary celebration should have focused on economics, but we had our own soiree, and so I refer you to it and you've heard at a number of sessions the contributions of the Bureau of Economics. The Bureau of Economics is a very special place with a lot of really talented dedicated people, and really provide a lot of the continuity within the Commission, because there's less turnover, particularly among senior people in economics, than there is with the FTC's lawyers.

So, in BE's Division of Consumer Protection, for example, there's some very important people that have been here forever and have been through all sorts of cases and I see some of them in the audience. And they're very important. The same is true on the antitrust side of the bureau.

Well, economics matters now, I think that that's not controversial anymore. I think virtually everyone accepts that you need, and antitrust has, an economics framework, and that framework is actually applied in cases likely to end in litigation. If we talk about antitrust, which is a lot easier than the consumer protection side, we clearly rely on core economic principles, the assumption of profit maximization and the theory of monopoly are the core economic principles on which there's really no controversy.

I think we have an economic framework, the trick is to usefully apply economics to the facts and institutions at hand and realize that you're doing it in a forum in which it's not vetted by economists, it's vetted by lawyers and judges. That's the trick, and I think we're still learning how to do that.

Most of you in the audience are lawyers, and you know that economists have trouble understanding that economics is the framework, not the answer, that lots of types of evidence and analyses are important in most cases beyond the economics, and we're not the experts on those sort of things like evaluating the credibility of documents or witnesses or customer opinions, et cetera, even though those sorts of pieces of evidence might be important to our economic opinions.

And of course the lawyers always point out that on any case you have, you're going to have economists, usually competent economists on both sides of the matter, and so obviously in economics, you couldn't determine on economics alone, in a complicated case. Economics can inform and certainly be important in the decision, but it's obvious that economics can't give you the decision.

So what do economists do? They use the scientific method of economics, or at least they should, form hypotheses, choose facts and data, perform analyses, and make their economic conclusions and then feed it into the legal system, and have it vetted, and it gets whatever weight the fact finder and/or the prosecutor decides.

The adversary system works well here, I think. I think it's perfectly appropriate that you have economists on both sides of things. I think you should want that. I don't think you would certainly want to have a situation where a judge just told a single economist to come to a conclusion on a matter as opposed to interpret the results put forward by competing economists on the matter.

So, I think the legal system works very well, and economics is not a science, particularly our area of economics, industrial organization economics is not part of science in which empirical verification has played a very big role, and the reason is it's very difficult to get the data to do testing, although we're getting more of that, but we don't have a lot of empirical testing or proof of basic hypothesis, particularly those that are central to antitrust. I'll talk about that in a little bit.

The adversary system works well here because the adversary system speeds things along a little faster than it does in the journals. The focus isn't necessarily on economics, but the criteria is not the same, administrability and other things are very important, and so the adversary system is good for economics.

I think my main concern is that so much of merger policy is really regulatory, it's not determined by litigation. Few cases go to court, and you don't have discovery the way you do in private litigation. I think that's the problem in mergers, and I'll talk about that.

Economics moves forward. It's not static. New research brings new knowledge. That new research is often applied quickly within the agencies, and that's good. I think the problem is that the new theories and the agencies can get ahead of the real testing of the theory.

In industrial organization economics over the past couple of decades, as compared to its earlier years where the empirical analysis was the foundation of the science, and unfortunately that empirical research we found in the end was actually all wrong, but a lot of people believed it for a long time.

In the last 20 years, industrial organization has been predominantly theoretical. And the advances have been theoretical, and theory has certainly outstripped the ability of empirical analysis to catch up, and the real testing that goes on in industrial organization (IO) is antitrust litigation. And I think that has to be true to have a sensible antitrust policy.

We have some case studies, I came to the commission in 1979. We had the cereals case, we had the Ethyl that I worked on, we had coffee, we had many of these other monopolization cases. That was really the first time that economics began to take the center stage. Those were very carefully thought out economics-based cases. And all of them failed.

And I got a good lesson from that coming as a much younger theorist at the Commission at that time, and having not much experience in this sort of thing, and I'm afraid that we may have forgotten that lesson, in that most of us aren't as old as me, and weren't around when those cases were around, and didn't read the decisions and didn't really think about wrestling with the issues that the fact finder had to wrestle with in the cases, even though the theories were in some ways pretty straightforward.

So, we have a past where economics really achieved a central role at the Commission, and it was good for economics, it was good for the law in that it straightened out a lot of stuff, it wasn't good for the respondents, I don't think, but a tremendous amount was learned from those cases, and I'm concerned that economists, particularly younger economists, don't go back and revisit those cases and read the decisions. I think they could learn a lot about the practical aspects of applying economics in complex situations.

So, we have the monopolization cases, in which the air was really cleared, think what IBM did, and think about cereals. You don't have in hardly any cases, serious argument about using profitability as an indicator of whether something bad is going on. There was a tremendous advance in that, and it all arose basically from Frank Fisher working on the IBM case and publishing a paper saying "wait a minute, you can't use profit rates." And that pretty much won the day.

There were other important things we learned about our ability to bring conduct cases, what was procompetitive or not. Interestingly, the TIO2 case was really based in what was the new IO at that time. The father of the new IO, Michael Spence, had written a paper on strategic entry deterrence through capacity expansion or other things, that was exactly what the TIO2 case was about. At the FTC conference in 1979, Michael Spence said, well, "wait a minute, you need to think about this, this is more complicated than you realize." And that decision came out shortly after the conference.

So, the monopolization cases were a very important source of new learning. I think we need to remember those things, and where I want to connect the dots is that the problem is these days (if there's a problem), hasn't been in monopolization cases in the recent ones, it's been in the merger cases where it may be that theory has gotten ahead of what it can actually prove.

Now, as I said, antitrust economics is fundamentally tested in litigation, the problem is it's very slow, and then the frequency of testing in the courts is low, and to get to the punchline on this at the end, which I think a very good example of that are the two recent cases, Arch Coal and Oracle.

And I'll say with disclosure, I did a lot of work on Oracle, so I have a lot of opinions about that, but I think both those cases make very clear that where the cutting edge in cases is complex market definition, in the case of Oracle, and particularly competitive effects analysis, and what you can really do and convince the judge of are the key issues, and I think those cases, in some ways, aren't very different from lots of cases, a number of cases that the agencies pursued over the last ten years or more in the analysis that was done, but those analyses were never vetted, because they didn't go to court. They were settlements. They were settlements or abandoned.

In those two cases, what was a pretty garden variety approach, you had come with the theory about there's an effect somewhere in this market, and in some ways you're not so careful about how you actually define the market, and you have a case. And economists support that, because the economists focus on effects, and what the court said in Oracle and Arch is wait a minute, you have to spell out with more specificity and convincing evidence that fits within the framework of the law.

Briefly on consumer protection, economists have made enormous contributions to consumer protection and they still do. I don't think that this is understood on the outside. Certainly the deception statement and unfairness statements were greatly informed by economics. Economists still have a big role, there's important people in the Bureau of Economics which BCP lawyers always go to on any sorts of major cases.

That's a very important role, too, where the economics is much more difficult, the economics of information in consumer protection is much more difficult.

So, economics has an important role, it's good. I think it's good that we are tested within the legal system. I think that when we have losses that we need to, just as the lawyers go back and think about, well, is the theory in this case properly applied, or do we need to think more about the theory that we think is easy in a given factual situation and spell it out with more detail, and make it convincing to the fact finder. Thank you.

(Applause.)

MR. PAUTLER: Now we'll hear from Jon Baker.

Oh, by the way, after everyone speaks, we will let each of the participants take a shot at each other, then we will take questions.

MR. BAKER: Thank you, Paul, and I'm glad to be here again. Nice to see all of you.

I thought for my opening presentation I would talk a little about the problem of case generation, and some of the history of how that worked out at the Agency, and particularly with the Bureau of Economics.

If you think about where antitrust cases come from, other than the fact that you have these Hart-Scott filings, and you have to look at them, they basically come from complaints from somebody outside the Agency or some development in the world or a story in the trade press that gets someone's attention.

And with that kind of approach to case generation, it's hard to know what the enforcers miss. Is the FTC catching most violations? Or only a small fraction? Or only the ones that you go after, are they worse than the ones that you didn't find? From a social welfare point of view, how do you know?

Bill Kovacic talked yesterday about inadequate planning, so has the Agency been captured by the trivial in the way Bill referred to it, by virtue of what's come in through the door, rather than finding where the problems in the economy are and going after those cases?

Now, the IRS worries about this a little, too. Are they collecting all the taxes? Sometimes I think they -- I don't really know this fully, but I have the impression that they have occasionally done random audits of certain classes of firms just to find out what they're missing. The FTC can't really do that practically, and I think technically the FTC has the authority to subpoena new information for research; but that's not going to happen, just to find out how we're doing on case generation.

And it's natural for the economists to think that there ought to be some better, more systematic way to proactively find good cases that would complement what is normally a reactive method of relying on complaints.

So, I studied up a little on some of the past efforts and I know about some of them myself. I talked with John Hilke and Paul Pautler and a little bit with Jack Kirkwood who was a lawyer in BC for a long time, all of whom had extensive FTC experience. My sense is that none of the efforts of case generation have had particular success, but they're all interesting, and it's not something that we should stop trying to do.

There are basically three main approaches historically to looking for cases, and two of these three just essentially involved the Bureau of Economics, and the third did heavily as well.

The first was to look at industries where profits were high. Market power would seem to create super-competitive profits. This was the strategy for case generation associated with the line of business programs by which a number of conglomerate firms were asked to provide accounting data that was disaggregated by industry during the 1970s.

Now, this program had broader ambitions than case generation. It was intended in part as a tool to do empirical industrial organization research, but its case generation promise was that we could find the markets where the firms seemed to be earning super-competitive profits persistently, and then think about what was the source of those and whether there was market power being exercised and how to attack it.

In practice, it was never actually used systematically that way. As I understand it, there were no cases that were actually generated using the line of business data as an initial screen, but the data was used to confirm that a case that was found in some other way might have made sense, that the Bureau of Economics memo might talk about profit rates or some of the determinants of entry barriers like perhaps advertising to sales ratios, that they thought were creating entry barriers, or look at R&D intensity and understand those features of the accounting data as guides to how the industry was working.

The program only lasted a few years. Firms complained about the special accounting requirements and the program lost political support. The values of the data is less clear now than it once seemed, as David alluded to, we economists have come to question how far you can go in inferring economic profits from accounting data, that the wedge between what the accountants are measuring and what the economists want to measure might be too large.

So, the second general approach to systematic case generation, on the economic side is -- I would describe as "let's look for industries with structural characteristics that are conducive to coordination." This is what the Agency lawyers and economists, as I understand it, tried to do in the 1980s. They looked for concentrated markets with entry barriers and then factors for facilitating collusion, the sort of list that you're used to, homogeneous products, perhaps, or industry excess capacity, or transactions that were open and small so that you could expect to detect police cheating rapidly and effectively. That sort of thing.

As I understand it, a lot of time and energy was also put into this effort at the Agency, but it didn't produce any cases either. Part of the problem is that in order to conduct a screen, you have to define the markets, but that's hard to do without having done the investigation. In the normal industry, where you had a complaint or whatever, you would conduct the investigation, and then figure out how to define the markets.

And part of the problem is, "what practices do you challenge even if you found a market where you thought there was a problem?" That's a general problem of all three cases, as you'll see.

The third effort of case generation that I wanted to mention was my idea, so I like it the best. We tried this out when I was director of the Bureau of Economics.

I talked about this in more detail in the symposium that we economists did in September 2003 on the 100th Anniversary of the Bureau of Corporations; that is on the FTC website.

The Bureau of Labor Statistics collects pricing index data for all sorts of industries, and it's disaggregated by SIC code, even more narrowly than the four-digit SIC codes that many of you might have seen, sometimes five, seven, at times even nine-digit SIC data. So, it's very narrow, closer to the size of markets that we end up defining in antitrust.

We looked for price increases that might have occurred around the trough of the most recent recession. The idea was if prices are rising from around the trough of the recession, it was probably not on average because input costs were going up, or because the firms were hitting capacity constraints -- the fact that this was around the trough of the recession, generally would have tended to control for that -- but it was more likely because of the exercise of market power as an industry where demand grew less elastic as the recovery began, so that the firms who had an ability to exercise market power could take advantage of less elastic demand in those industries and raise price.

And so we identified hundreds of industries to look at, and I think it was Denis Breen, who I see here, and Ron Bond, and me picked about 25 of them arbitrarily to study further. We divided them up among the staff economists to go look at them for a couple of days and report back.

In most of these industries, it turned out that there was a plausible explanation for why their price rose. Costs had actually increased, notwithstanding on average that you wouldn't expect that to happen, but when you looked more specifically it turned out they did. Or maybe the BLS data didn't adequately control for quality improvements. But I think we found three out of the 25 where we couldn't find any other explanation for the price increase than market power.

We thought about investigating -- getting the Bureau of Competition involved to investigate these three. Well, it turns out that it was inappropriate to investigate two of them. One of them, for example, the Department of Justice -- I think the Commission asked for clearance and it turned out that DOJ had a bunch of Grand Juries regarding price fixing.

So, the Bureau of Competition investigate the third, and I think the way they went about it is they asked the companies for documents that would explain the price changes around the period that we were looking at. And then after looking at this, they concluded that probably it really was the exercise of market power, there was no other good reason that they could find in the documents, but there wasn't anything that the Commission could do about it. They didn't identify an agreement or a facilitating practice to challenge or anything like that, and so they closed the investigation.

And so ultimately this approach to case generation came up empty, no cases. Now, I thought we had proven the technique was viable we had three good possibilities out of 25, and if it hadn't been for the merger wave, I would have asked the staff to go and look at 25 more and see what we came up with there. I think we had 600 or so possible candidates.

So, I still think this is a good approach for systematic case generation, but I can't stand here and tell you that it's been, a proven demonstrated success.

This is a way of saying that there's really something interesting that comes from thinking about the process of case generation like economists, what economists can bring to the table. Consistent with what Dave was suggesting before, different eras have different perspectives, there's a different consensus in the profession about what a sensible approach is to identifying good cases, and the accounting data that was once thought of as a very attractive vehicle for doing so is less thought so today. Probably in the future someone will come up with a different approach all together based on new developments in economics, but something that ought to still be tried, and I hope that the 180th anniversary of the Commission we're up here talking about their successful attempts at case generation.

(Applause.)

MR. PAUTLER: And we will now hear from our current bureau director, Luke Froeb.

MR. FROEB: Thank you, Paul. Paul is one of the keepers of the flame at the Bureau of Economics, and his knowledge of the history of the place is just unparalleled, and so whenever I try to do something stupid he lets me know about it, and I want to thank him for the mistakes that I haven't made and not blame him for the ones that I have.

I want to play the role of ghost of Christmas future right now and I know that Johnny Ramone died this week, I don't know where you were when you heard, but anyway, he was in Rock N' Roll High School, my favorite line was I don't care about history, because that's not where I want to be. So, today I want to talk about where I think economics is going in the Bureau of Economics and how we're going to get there.

And I don't want to disagree hardly with anything. I thought I was going to, so this may not be as interesting a discussion session as you thought, but I want to agree with things that Dave has said and about the importance of empirical work.

Empiracal work in academia is a real problem that I observed first hand when I fly home every other weekend to go teach at Vanderbilt. When I get there it's really depressing, because academia is so sterile. We divide up problems into such narrow little pieces that nobody's interested in the answers, and it's depressing the direction the field has taken, because I think it's making itself largely irrelevant,which has led Bobby Willig to say that never before has antitrust economics been so important to the field, but never before have economists been so irrelevant to the field.

And so the point of this talk is try to figure out what role can economists play and how can we make ourselves more relevant? The great thing about this job for me has been the people here and I want to acknowledge all the people who have contributed in some way to this talk.

And I want to talk a little bit about the movement from form-based analysis to effects-based analysis, both in antitrust and consumer protection. And in mergers, this has been a theme for the -- and again, I'm not as conversant with the history of the FTC as my colleagues here, but certainly you can trace the development of merger analysis from simple share-based analysis to the 1992 revisions that brought competitive effects to the forefront, and then the 1997 revisions were supposed to give efficiencies more weight in the analysis.

I think the jury is still out on whether or not we evaluate efficiencies properly in our work you heard some comments to that effect yesterday. And I want to talk a little bit about vertical restraints, where we've gone explicitly from per se condemnation of various forms, is this an exclusive deal, to an analysis of the effects of the vertical restraints, and this has paralleled changes that are under way in the European Commission.

We tend, in the United States especially, to focus on the disagreements between the EC and the U.S., but I think the similarities are much more significant, and just recently the EC has adopted new merger guidelines. They've gone to something very close to an analysis of the effects of mergers, SIEC, substantial impediments to effective competition criteria, and in vertical analysis in Article 81 they have gone to an analysis of the effects, including the efficiencies.

And to implement these changes, they have hired a chief economist and put an economist at the very top of the organization chart (where they belong, incidentally), to ride herd on the attorneys. And the theme of this talk is that economists are trained to estimate effects. This is what we do, and there's two basic ways to do it. One is we can begin with good, natural experiments that mimic the effect of whatever we're looking at, the effect of the merger, the effect of the vertical restraint. Alternatively, we can use a model-based approach.

And finally (you heard about this yesterday), the importance of enforcement R&D, following up on what we're doing so we can develop better practices about what we're doing. This is a chart that many of you have seen before. This is our enforcement data for 1996 to 2003 covering the Pitofsky and Muris regimes, and the interesting thing about this is that concentration seems to be significant, but it's not the only factor.

We block most mergers to monopoly. For three to two mergers, there's a significant number that we let through. For four to three mergers, it's about 50/50. Above that, we let them go through. That's basically what the analysis says.

And the reason we let them go through is because of the competitive effects. Market share is a screen, but often we can't get through the competitive effects analysis.

And recently we've started doing merger retrospectives. This is another chart that some of you have seen before, Dan Hosken and Chris Taylor did a merger follow-up on the Marathon/Ashland joint venture, and this was a fairly big merger in an isolated product market that used reformulated gas, so there were no close substitutes.

So, if you were going to see a merger effect, you thought you would see it here, and on the horizontal axis is plotted time and on the vertical axis is price, and well, compared to what? That's the methodological problem. So, we used the premerger period as the control, the postmerger period as the experimental period, and then you say, well, what other things could have accounted for that change?

Well, to control for the other unobservable factors, you measure the price relative to prices in similar markets, and the three lines there are the price in Louisville relative to Chicago, Houston and Virginia, and we don't see much of a merger effect, or certainly the variance swamps any kind of merger effect.

Vertical integration. Where we're going in vertical integration is towards the analysis of effects. Well, we have to figure out what the effects of vertical integration are, and there is a surprising amount of empirical literature on this. Using the analogy of a natural experiment, we had an experimental group that mandates vertical disintegration of refiners with gasoline stations. There's six states that do that, Hawaii, Connecticut, Delaware, Maryland, Nevada and Virginia, and our own District of Columbia, and we have a control group that are vertically integrated, and what do we find, that the prices are higher in the group that makes them vertically disintegrate.

And this corresponds with an enormous amount of literature in the franchising area, where vertically integrated firms are found to have much lower prices.

Finally, I don't want to leave out consumer protection where we've gone from maxims that, well, more information is better, or in the health area, more information is worse, because people might use it, and towards, trying to figure out what's actually happening in these areas. What are the effects of the information disclosures or prohibitions?

And in the health care products, Pauline and others at the bureau have done some remarkable research showing that if you let people advertise the health benefits of food, and they do, and that leads to consumers making more healthy choices. And this line of research has lots of implications for the coming debates, the coming obesity wars into which the FTC will be dragged.

And the final thing I want to say is poorly designed information disclosures can harm consumers. And here I want to talk about the research of Jan Pappalardo and Jim Lacko, who analyzed some of the information disclosures on mortgage loans, and they found that when you design an experiment where you show consumers an information disclosure and then you show them another information disclosure that has the broker mark-ups -- the one has just the loan information, the basic loan information like the APR. The other form has the same information plus the disclosure mark-ups -- we found that consumers get confused when you show them too much information.

And it was really incredible to me that 40 percent of the people couldn't identify the cheaper loan when you showed them the mark-up because they focused on the mark-up and said I don't want the brokers making that kind of money. And so they made the wrong choices. And if you've got that kind of disclosure, what's that going to do to competition if consumers can't even identify the lower-priced product.

Anyway, that's where I see the future of economics in analyzing the effects of these various proposals and less towards the legal approach as well. Let's put these behaviors in little boxes and label one anticompetitive and one pro-competitive and call it a day, whereas the economists say, well, we would like a much more flexible approach where you actually look at the effects of these things.

(Applause.)

MR. PAUTLER: Now we'll give the participants a chance to comment on the others' presentations and then we'll have a couple of questions.

MR. BAKER: I have a comment on what Luke had to say. First, his talk reminded me of another Ramone line, "I want to be sedated." No, I'm just kidding.

(Laughter.)

MR. BAKER: No, I have a serious comment, which is that there's a movement -- I wrote an antitrust case book with Andy Gavil and Bill Kovacic, we wrote what we think of as a modern case book that's different from the earlier case books that are widely used, partly because it takes seriously the modern appeals cases, but partly because it reflects a change in the way antitrust law is framed in the courts. We called it a movement from categories to concepts.

It's really quite similar to what Luke was talking about here, that the focus in the modern appellate cases isn't any more on identifying the pigeonhole you put a case into so much as what the theory of harm is. You can see that, for example, in Judge Posner's JTC petroleum case. What Judge Posner is interested in is what's the story by which you can understand why the conduct could be harmful to competition. It involves excluding a maverick firm as a means of cartel policing. He's not interested in whether you want to call it a group boycott or price fixing or vertical or horizontal for that matter, he's really focusing on "what's the story."

All this came about not just because of the influence of economics, which has been very important, and I agree with Luke about that, but also, this is really the thing I learned in writing the book with Bill and Andy, is the subtle and deep influence of the Brunswick decision in 1977, which for those of you who aren't lawyers here, is the first decision that introduced antitrust injury as a requirement, in a narrow way, but it's since grown to encompass much of what goes on in antitrust litigation.

By forcing a plaintiff to articulate a theory, a theory by which his injury grows out of the violation essentially, what the courts are forcing plaintiffs to do is articulate the economic theory of why competition is harmed. It's what brought in all of the economic analysis into the courts, importantly, and pushed this movement from what we called category to concepts and I think what you called "form to effect," and I view it as quite a similar idea.

MR. FROEB: I do not endorse sales of his book.

MR. BAKER: I was going to talk about your book.

MR. SCHEFFMAN: Come on, too much kissy face here, guys. Let me give a contrary note here, a little bit to what you and Luke said. Let me attack your book, Jon.

(Laughter.)

MR. SCHEFFMAN: No, Jon and co-author's book is a very nice book and I consult it regularly, but, you know, I once consulted it to try to find a detailed analysis of market definition, and I couldn't find it. And because in my view a lot of economists have advocated that market definition is really superfluous and likely to lead you the wrong way.

I strongly disagree with that and I'll pick up a little bit of what I said earlier. We have a whole legal structure of case law based on defining markets and measuring share and concentration, and that's been improved by we're much more sophisticated in defining markets which are really relevant to competitive analysis, more careful about measuring shares and concentration, and then we've added on top of that when you start with that then you have to have a story as to why, say, a merger is problematic. I think that's a very sensible approach. And dispensing with it leaves you out in an area where economists might be comfortable with it, but have difficulty actually providing answers.

And so we have problems in cases in which, especially in unilateral effects cases, or price discrimination cases, where we're talking about what in the guidelines talks about effects within the market. The courts have trouble, "wait a minute, I understand how to define the market and the shares and the concentration, and I'm used to a story where I'm connecting that directly to effect in the marketplace, but this effect within the market, sort of thing, unilateral effects, what is that animal?" I understand unilateral effects if it's a dominant firm where the share is big enough. But aren't you really saying that there's some -- and this is a struggle within the agencies -- aren't you saying that the market is a lot narrower than that and why don't you just define it that way and the problem is that for many cases it wouldn't seem to pass the laugh test.

So, I think the reality of the juris prudence is you have to define markets and shares, and so you have categorize and put stuff in boxes in that sense. And what economists in my view have to realize is that's the way the game works, and there's good reason for it, it's not going to change in any event, and we've got to spell out and be more articulate and prove theories that fit within that framework. That's something that we haven't done a good job with, on, up until now.

MR. BAKER: I just have to mention the slur on the case book. If you consult chapter 5, you will find a discussion of market definition.

MR. FROEB: But Dave, don't you think that market delineation gets in the way of a good competitive effects story? I mean, for example, in an auction market where every product is unique and you've got a good unilateral effects story -- that for some subgroup of customers these are the first and second best choices and that you get an effect in those cases -- don't you think market delineation gets in the way of that competitive effects story?

MR. SCHEFFMAN: It gets in the way of economists telling the story, but it's a real problem for judges who want to articulate a market and identify the entities that are affected as opposed to saying, well, they're out there somewhere, clearly. I think that's the problem. And that's the reality of the law, I think we see judges struggling with that problem in some of the recent cases. And in my view it's good that we have to do that. And economics has to go further than it has in being able to help the analysis and the development of facts for those sort of cases.

MR. BAKER: I think Luke would say that even in a coordinated effects analysis in merger cases he would define the market, and I think Dave, there really is a lot of economic content to market definition and I think you do this all the time when you define markets.

If you think about what we do when we define markets, under the guidelines we're looking at buyer substitution. That's the economic force at stake in answering the question as to whether the hypothetical monopolist would find it profitable to raise price or whether be defeated by the buyers going to alternatives outside the market.

There are all sorts of aspects of economic evidence that are relevant to answering that question. Some of it is very quantitative, if you look at what did buyers do in the past when prices rose, and what did you learn from that if prices rose now. You can survey the buyers or, ask them the kind of questions that Dave was asking. You can understand the distribution of buyer characteristics and switching costs and product characteristics and model the process of buyer choice
and then model whether in response to an increase in price how many buyers would switch.

All of that is heavily economic and empirical. There are other things we do in market definition that are a little less heavily technical on the economic side. We ask the firms themselves, we look at what they monitor, at what they respond to, and we assume that we were trying to infer from that what they think buyers will do.

And the same thing when we talk to industry experts about the industry, but those are a little less in the data and more what do experts think, but a lot of what we do in economics is very heavily empirical in market definition.

MR. FROEB: I think the problem is that market delineation is about drawing bright lines where none exist and you're always going to find somebody on the wrong side of the line, depending on whether you're working for the plaintiffs or the defendants, if you draw a bright line where none exists. And it's not the same question.

If we're trying to figure out if a merger is anticompetitive, that may only be tangentially related to the problem of market delineation and that's where I think it really can focus the investigation on exactly, largely irrelevant piece of information.

MR. PAUTLER: I just want to ask the panelists here, along these lines, if part of the problem here is having sufficient data so you can do away with the market definition boxes. Isn't it true that we're still a long way from having a sufficient amount of data on markets, even probably consumer goods markets, to get there in the near term and we're going to still be using the market definition boxes and devices to think about the competition issues until we get to the point where you can actually empirically get down to the bottom line effects. I just think that we're probably some decades away from getting to that nirvana.

MR. SCHEFFMAN: Well, what economists are advocating it's hard to imagine is going to happen without -- as I keep saying, you economists better understand that things work in a certain way and the market definition is really important. I don't think you're going to get retained as an expert and say well, I don't need to try to define a market. The Department of Justice tried that once in a merger case and it didn't work very well.

We use markets and thresholds that we lose sight of in mergers, that we look at in vertical, it would be senseless to abandon market definition and share. Because I guarantee you
could find some guy with a little two percent share that moved to an exclusive territory and the price went up because of it and that's probably why they wanted to do it, because they wanted to have services, the usual story, you would have a case. You would have an effect for economists to say, well, yeah, I've got an effect, the practice led to the effect, I don't need to worry about market or share. There's the effect. So, we obviously have --

MR. FROEB: But you control for the quality and the services. I mean, that would be the story. If you're measuring the effect, you can't just look at one effect.

MR. BAKER: The question here is whether the direct evidence from the prices and all that Luke was just talking about is so powerful, so convincing, and controls for everything you need to control for, et cetera, that you do not need to make inferences about market power from market concentration. There will be some cases where it's more probative than others. And my guess is there are a lot of cases where Dave is right and you still want to look at the market, and there will be some where Luke is right.

MR. FROEB: I agree that it's such a cop-out to say "it depends" but it does. And in some cases market delineation is a perfectly worthwhile exercise, and in others I think it gets in the way, and most importantly, it diverts scarce enforcement and judicial resources from the real issue.

MR. PAUTLER: Since we're here to think about history, there's one bit of history in the economics of antitrust that I've been interested in, and all of the members of the panel here have some background in it.

It's the effects of the economic consulting industry. It's a growth industry started in the 1970s, and obviously you can see it on K Street and you can see it in College Station, Texas in the '70s, and it's grown up now and I was just wondering if our panelists have any thoughts about what the effect of the economic consulting industry has been, whether it affects the way the agencies behave, and whether it's a leader or a lagger in bringing economics into antitrust.

MR. SCHEFFMAN: Let me say briefly, these are good jobs. These aren't hamburger flipping jobs.

(Laughter.)

MR. SCHEFFMAN: They could be outsourced, though, maybe, so there are a lot of very good Indian and Pakistani economists, to say nothing of other places of the world. And some of us make almost as much money as lawyers, so what's not to like?

Economic consulting has really had a profound impact on industrial organization. Again, we're talking about studying, studying a topic in which only as a consultant can you ever get access to the details that you would really like to know about how companies and industries really work. You don't have that as an industrial organization economist. Very few industrial organization economists do business consulting for companies, and even then it would be relatively few.

So, there's just been a tremendous expansion and knowledge in the profession, both because of what's happened in the Agency and outside. And so we have, you know, really brilliant people, like Bobby Willig who made tremendous contributions to antitrust, and those contributions have certainly been stimulated significantly in part because of his consulting experience, you learn much more about the way things work.

So, it's been beneficial for the discipline for how economics understands the competitive process and competition and that's informed antitrust we have much more literate, we know so much more than the 1970s when we really thought there were simple oligopolies and we discovered actually there are not. There are oligopolies, but gee, they're a lot more complicated than we thought. And we've learned much and much more of that over the last 25 years of HSR and antitrust litigation.

And it does help the agencies, I think, it does keep the agencies honest to help them make more right decisions, (and it does mostly make right decisions), to get economic arguments coming from the other side. I think the Agency economists inside learn from that and listen to that and a number of times the consultants on the other side have pioneered analyses that the Agency economists have seen. That's pretty interesting, we'll do that. Most of the innovations have actually come from within the Agency.

MR. BAKER: I don't have quite as a uniformly positive view of the consulting economics as Dave does. I think it's clear that economics actually channels scholarly research in industrial organization away from sort of basic R&D and towards application. And I think you see that where the top IO economists spend their time. Some of the leading consultants essentially stop participating in the academic conferences and start on their cases and it's where they get their data, it's where they get their ideas, it's where they do their work, but they're not doing what they would have done otherwise.

You see that and some of that in the blurring of lines between research and advocacy, where companies are funding directly or indirectly policy research. That, too, is channeling the research towards applications.

And in the research end of economics, I wonder whether an example wouldn't be Luke's really good work on merger simulation tools and antitrust merger models. I don't know what Luke would have done if he didn't have antitrust problems as his focus. Had he not chosen how to think about how to evaluate mergers on the antitrust laws.

And there's some other effects, too, that are a little more ambiguous. I think that the consulting profession essentially brings a lot more resources, money and good students into the IO field. And that's good for the IO field, but whether it's good for economics as a whole depends on what they would have done instead. And whether these folks would have had a more specially productive career like going to law school and becoming antitrust lawyers.

MR. FROEB: I can tell you what they would have done instead.

MR. BAKER: As far as what happens at the agencies, it sharpens everybody's arguments and that's good, on both sides of the case. But also investigations are more complex and time consuming and costly, especially when an arms race develops between the agencies and the parties. Whether that's worth the trouble, I think, is an open question, too. It's certainly better that the case outcome gets better, but again, you have to ask what those resources would have been doing otherwise.

MR. FROEB: Let me try to answer that question. I spend half my time back in academia flying back and forth, and academia is so sterile you wouldn't recognize it as doing anything useful for society. Academics are rewarded for cutting up problems into such small pieces and playing this theoretical game of gotcha. You're supposed to come up with counter-intuitive results, regardless of whether they're likely or not, and it's also a supply-driven thing. You have a model and say, hey, I can modify that model and get another model, and publish that. And you end up with an answer to a question that nobody is asking.

And I think that the real benefit of consulting is that it gives you the questions, and so instead of starting with an answer, you start with a question, and I think that's so rare in academia, and the only thing that keeps academia grounded is the fact that you actually have policy.

MR. SCHEFFMAN: Come on, Luke, you don't want to tell your dean about that.

Most R&D, true upstream R&D is wasted, and it's wasted in academia, that's true. But so the productivity is low on average, but there are big hits, so every year important papers come out on industrial organization out of academics that move the ball and a lot of them are very derivative and that's also true of a lot of R&D that goes on in the private sector. But it's the hits. We're looking at the wrong target. We don't look at mobile --

MR. BAKER: And sometimes the questions that aren't being asked are the ones that ought to be asked.

MR. FROEB: Necessity is the mother of invention.

MR. PAUTLER: Well, I'm not sure that we'll ever get the question solved about what the optimal amount of R&D is, but I think we do know that we are finished with this panel and I would like to thank all of the participants.

(Applause.)