Interview with Michael Katz, U.S. DOJ's Chief Antitrust Economist

ABA Section of Antitrust Law "Brown Bag Program"

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Michael Katz

SPEAKER

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Ed. Note: *Michael Katz, Deputy Assistant Attorney General for Economic Analysis at the U.S. Department of Justice, offers his views with notable thoughtfulness and clarity in this discussion of antitrust and economics in the new Administration's Antitrust Division. As Chief Economist of the Division, he directs a staff of approximately fifty economists and oversees the analysis of economic issues arising in both merger and non-merger enforcement.*

On detail from the University of California at Berkeley since September 1 of last year, Dr. Katz is the Edward J. and Mollie Arnold Professor of Business Administration at the University of California at Berkeley, where he also holds an appointment as professor in the Department of Economics. He is a four-time finalist for the Earl F. Cheit award for outstanding teaching and has won it twice.

The interview draws on Dr. Katz's experience in antitrust as well as in telecommunications. He served as Chief Economist of the Federal Communications Commission from January 1994 through January 1996, where he participated in the formulation and analysis of policies toward all industries under Commission jurisdiction, including broadcasting, cable, telephone, and wireless communications.

Dr. Katz has published numerous articles on the economics of networks industries, intellectual property licensing, telecommunications policy, and cooperative research and development. He has served as co-editor of The California Management Review *and a member of the editorial board of* The Journal of Economics and Management Strategy*. Dr. Katz also served on the Computer Science and Telecommunications Board of the National Academy of Sciences and was the Director of Berkeley's Center for Telecommunications and Digital Convergence.*

Dr. Katz holds an A.B. summa cum laude *from Harvard University and a D. Phil. from Oxford University. Both degrees are in economics.*

The following interview was conducted as a joint "Brown Bag" program of the ABA Section of Antitrust Law Communications Industry and Economics Committees. The session was moderated by Henry McFarland, Vice President, Economists, Inc., Washington, DC. Questioners were Barry Nigro, a Partner in Fried Frank Harris Shriver and Jacobson in Washington, DC, and Philip Nelson, a Principal with Economists, Inc., in Washington. As is customary with the Brown Bag interviews, the audience, participating in person or by teleconference, also was able to question the speaker.

The Brown Bag session took place on December 5, 2001. The Antitrust Source is pleased to present this edited and updated version of the transcript of that session. We also provide in this interview Dr. Katz's answers to additional questions posed to him by members of our Editorial Board on February 25, 2002.

HENRY MCFARLAND: Today's Brown Bag, which is being jointly sponsored by the ABA Section of Antitrust Law Economics and Communications Industry Committees. Our speaker today is Michael Katz, the Deputy Assistant Attorney General for Economic Analysis. In addition to questions from the audience, he will be questioned by Philip Nelson, Chair of the Economics Committee and Barry Nigro, Chair of the Communications Industry Committee.

Dr. Michael Katz is the Deputy Assistant Attorney General for Economic Analysis in the Antitrust Division and the Former Chief Economist of the Federal Communications Commission. Following his brief introductory remarks, he will answer questions both from the audience here and from the audience at the different satellite locations. Philip Nelson and Barry Nigro will interject questions where they think it is appropriate.

MICHAEL KATZ: I'd like to mention a couple of things before I get started.

One, I want to be clear that I'm going to talk about *my* views on matters. You can try and read into my remarks what it all means for the Department of Justice, but I'm not going to say, "This is what the Department's going to do." You should view these remarks as my thoughts on economics and anything else I talk about.

Second, I want to say a few things about the economics of mergers. I won't say anything in my opening remarks about telecom specifically. However, you should feel free to ask me questions about telecom.

Let me say a few things, generally, about mergers and, in particular, about unilateral effects and and merger policy. The major thing we're supposed to be looking at is competitive effects. Being an economist, I, of course, view this as an economics exercise, where you need lawyers to help you get the papers filed. Unfortunately, my colleagues at DOJ don't all see it that way. In any event, let me say a little bit about the economics of merger analysis. I might as well just jump in with a couple of remarks about the theories of harm.

There's at least a perception among practitioners that there's a problem with unilateral effects theories. Sometimes the question I get is whether there are too many unilateral effects cases. Sometimes it's whether there are not enough coordinated effects cases. I suspect that, in fact, there is unhappiness with particular merger cases in differentiated products consumer goods markets, and that's what people mean when they say they don't like unilateral effects cases.

I keep hearing there are too many unilateral effects cases or the agencies run amok with the theory, but nobody has ever mentioned to me which cases they are talking about. Certainly, from my distant view in California, as I look over the past few years, most of the complaints I've heard are

from people saying, "There are too many mergers going through and why don't the antitrust authorities block them?" I have not heard the view that there are too many being challenged. So at some point, either today or in the future, I would like to hear what people have in mind when they talk about the problem.

I generally think that there's been an uneven development in the antitrust economics of unilateral effects theory and coordinated effects theories, and I think it would be useful to redress that balance.

That said, I think there are issues to talk about. I generally think that there's been an uneven development in the antitrust economics of unilateral effects theory and coordinated effects theories, and I think it would be useful to redress that balance. So I want to talk about that a bit.

Before I do that, though, I also want to say one thing that is probably heresy in general, and is certainly heresy among economists. I don't think we have a good sense of what we mean when we say "unilateral effects" and unilateral effects cases. I know some economists would mean taking the differentiated-products Bertrand model of the industry and seeing what it says. Now, you can conduct that exercise, and it can be a useful exercise and a way to stimulate your thinking, but I can't believe that's what we mean by our theory of harm because, typically, that model is at best an abstract representation of how an industry works that we use to get general insights. Another definition of unilateral effects given by many is that, post merger, the parties can raise their prices even if nobody else goes along. Of course, as soon as you say nobody else goes along, you've got to tell me what that means. Does that mean rivals freeze their prices? Freeze their investments? Freeze their products? Freeze their output? Well, they can't do all of that because it may be impossible to freeze both output and prices, unless firms just turn customers away. I think by definition there has to be some reaction of competitors to anything a firm does. So, if you're going to say that unilateral effects occur when a firm acts, but none of its rivals does anything, that's essentially a vacuous statement. You have to have in mind some notion of an accommodating or non-accommodating response, and I don't think that has been very well thought out in unilateral effects, beyond where you take the differentiated products, one-shot game, or Bertrand model. I think that this model has got to be narrower than what lawyers have in mind when they talk about unilateral effects. I think that if we're going to get into this debate much, we need to go back and rethink exactly what we mean by these terms. As I said, I may be a minority of one in thinking that, but I issued a disclaimer at the beginning of my remarks.

That said, let me pretend we all know what unilateral effects and coordinated effects are, and just say a few things about each because there is a certain aspect of this exercise that invokes the old saying about how to define art or pornography: you know it when you see it. From the unilateral effects standpoint, there is this sense that there are too many unilateral effects cases or somehow the theory has run amok. In a lot of ways, it's ironic because if you think about why we saw a rise in unilateral effects theories relative to coordinated effects theories, it was because there was a concern that coordinated effects theories lent themselves to mischief.

The historical approach to coordinated effects analysis has been to check for the presence of a set of structural factors thought to be conducive to tacit coordination. For example, are prices publicly posted, as in a supermarket, or are they privately negotiated, as in the sale of aircraft engines? Publicly posted, uniform prices are generally thought to make coordination easier than are negotiated prices that vary across customers and are not made public. People debate whether product differentiation makes tacit collusion harder or easier. Another example of a factor is whether firms have the same cost structure.

There are several problems with this approach. One is that we need a better understanding of the theory and empirical support for the various factors. Two, we need to understand how these factors matter for assessing the impacts of a *change* in market structure. Three, we need a way to assess the combined effects of the various factors. If one simply weighs them up in some myste-

rious way, then one can get out of the process whatever one wants, because in almost any industry one can find some factors that suggest the ability to sustain tacit coordination would be made worse by the merger, but those same industries would have other factors pointing in the opposite direction.

There was a concern that this approach would lead to too little discipline in terms of bringing cases or doing analysis, that there were just too many degrees of freedom or too much flexibility. A big part of the thinking behind the rise of unilateral effects theories was that we can pursue them more rigorously; we can tie them into econometrics; we can quantify the factors and balance them; all to put the whole analysis on much more sound footing and stop people from bringing cases that aren't warranted.

Now, it's certainly my sense that a lot of people in the antitrust bar do not think that's how it has turned out. To the extent that there's an actual or perceived problem with unilateral effects theories, part of the problem is that the Division should, and I think will, be clearer about the materiality standards it uses. You hear people say that if you use a unilateral effects model, then in almost any differentiated product merger you're going to find some effects, and there are people who say that can't possibly be right, so the theory must be wrong. I would offer a different view of the issue. Barring efficiencies, it may well be true that, when one analyzes a large number of differentiated product mergers, one's best estimate is that there will be some increase in price. But that doesn't mean we should bring a case because, of course, there's always uncertainty in these things, and there are going to be other effects brought about by the merger, such as reactions by other firms. There are efficiency claims. So I think we need to be clearer about what is done. It's not the case that we will oppose a proposed merger simply because some model predicts that prices will go up one-tenth of 1 percent while other iterations may say something different. Our decisions are based on the overall analysis, which may include econometrics, but certainly not econometrics alone. We will also be looking at the facts of the case and sometimes directly making sure we have a story that makes sense, that fits with the way people in the industry think about the market. We have to decide when the effects are big enough, given the other things going on in the case, like the efficiencies, and also take into account that if we don't know what we're doing, we should leave the market alone. We need to be clear about how we make these determinations.

Let me give one example where it seems that people really wonder what's going on with unilateral effects. Some people have said we should never bring a unilateral effects case because all we're doing is admitting we couldn't get the relevant product market to work and that we lost the case on the question of relevant product market. Not necessarily that we lost in court, but that we lost intellectually when we were trying to factor the relevant market in our analysis. The claim is that we'll make an end run around our burden by saying that the market is really broad, but then claiming there are narrower unilateral effects within the broad market.

If you think that we approach market definition and prosecutorial discretion in the ways I am about to describe, then it is understandable that you would think this of us. Consider the following hypothetical. Suppose the way one defines a relevant product market is by determining whether a hypothetical monopolist could impose a small but significant non-transitory price increase of 5 percent or more, and do it profitably. Suppose that the number for materiality was 5 percent, which is to say that one wouldn't bring a case unless the best projection of what the merger would do is to raise prices by at least 5 percent. In this hypothetical world, the only kind of unilateral effects cases one would see are those arising from mergers of two firms to one. This view of materiality says that if these two firms were to merge, then controlling the products they jointly control, they'd be able to raise the prices by 5 percent; that's the materiality standard. Now, if you go back to the

market definition process that I posited for this hypothetical, which looks at the set of products for which a monopoly controlling all of those products could profitably raise prices by 5 percent, then those two firms could do it on their own. So with that materiality standard, if you thought there were unilateral effects, you would think it's a merger-to-monopoly. Who cares whether you call it a unilateral theory or coordinated effects merger-to-monopoly; you wouldn't bother with that distinction.

Now don't rush out and say that we have a chief economist who, even though he doesn't count for anything, admits the DOJ screws everything up, because I don't think those are our standards for market delineation and materiality. What I'm saying is that I would like to see us clearly articulate what the standards are because I don't think the considerations for the two are the same or that the percentage standards are the same. Moreover, I don't think, at least as a matter of economics, that one wants to have a single number for materiality. A lot of it would have to do with the specifics of the market and with our ability to predict the competitive effect with any competence. In some markets, if you thought prices were to go up by 2 or 3 percent, then you might think that's a really big deal. There may be other markets where prices are routinely moving by 10 or 20 percent in a year and those aren't really the important dimensions of competition—you need to worry much more about innovation or something like that. So I think part of the debate about unilateral effects really isn't about unilateral effects. It's the question of materiality.

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Another part of this debate that is somewhat misdirected is a concern that somehow economists have run amok, that they've gotten a bunch of computer models and they're simulating mergers with abandon. Some of you appear to be assuming you and your clients will all be victims of software gone awry or an economist gone awry with the aid of software. Again, that's a misperception and overreaction. I can certainly say going forward—and you may be able to point out examples from the past, although I don't know of any—that we are not going to be bringing cases where the sole reason for being concerned is that a simulation model says a merger is going to have a bad effect. We will be looking for a story and want to look at the actual institutions and structure of the market, understand how it works, understand how market participants think it works, and be able to tell that story and work through it. I think simulations have a useful role to play, but, as others have said, we are still in our infancy in learning how simulations work and in learning what they tell us. That said, I don't want us to stop doing simulations. They can be useful and they can provide information, so we'll keep doing them.

Another thing I want to do is make a distinction between simulation and estimation, where the latter is the process of calculating past competitive effects using econometrics. Sometimes, we have an industry that has multiple markets within that industry and they have different firm organizations or different concentrations, for example, across the different markets. In these circumstances, doing a cross-sectional study can be a very useful way of understanding whether, for instance, we should be worried about a merger based on whether concentration appears to matter. Some people say, "Oh, it's just econometrics; you're just making this stuff up." That criticism could be valid with bad simulations. I guess it could be true with any bad econometrics. But particularly when you're doing these cross-sectional studies, the criticism is exactly backwards; those studies are about trying to understand the facts of the market in a systematic way to see if there really are effects. In fact, that's a very good discipline in conducting the analysis of a merger. In discussing the role of econometrics, I don't think it makes sense to lump simulations and these cross-sectional or historical studies together. Now, obviously, they are sometimes used together. For instance, you do estimation to get the parameters for the simulation model. But they are two different exercises, and each of them certainly has its room for improvement.

There are things the Division is doing in cooperation with the Federal Trade Commission. You've probably heard about some of them. We are working together on the econometrics of unilateral effects. We're working to improve techniques in cooperation with each other, and that effort will involve cooperating with the private bar and with industry, as well. So let me add just a couple of things about coordinated effects; that is another area where we're working internally with the Federal Trade Commission to improve our thinking in order to bring as much discipline and rigor to that as we can.

It is a fair assessment that development of economic tools for unilateral effects has gotten out ahead of where we are with coordinated effects. If you think about how we talk about coordinated effects, the typical sorts of principles, tools, and techniques that we put out are probably the same as those put out ten or fifteen years ago. Partly, that may speak to the principles' being good ones and to identifying the right effects, but there is room for developing additional investigative tools. One of the things we have to do, instead of looking at factors individually, which is often how they're talked about, is to start thinking about clusters of factors and any particular patterns we tend to see.

We need to do everything we can to understand the interactions among different factors. An important point is to go beyond simply stating factors in isolation and then somehow counting them up. We do go beyond this, but I just want to remind ourselves that we need to do even more. The factors provide an indication of whether an industry is one in which tacit collusion is likely to be successful or less likely to be successful. We need to tie our analysis as much as we can to how a merger would *change* those factors and the likelihood of tacit collusion. We see this type of analysis when people ask whether one of the merging parties has been a maverick, because then you're very much saying this merger is going to cause changes that really matter.

It can be dangerous criticizing the agencies from the outside, but before I got to the Division, the focus may have been too much on whether different industries were conducive or not to collusion, without asking enough about whether the merger actually changed things in a way that mattered. Now, certainly since I've been at the Division that's never happened. But, as an outsider in the past, it looked like that. Those are just some of the things to do to build up our ability to analyze coordinated effects to the extent that we have with unilateral effects.

I'd like to stop there and now briefly talk about the role of economists and whether economists should run the world. I will say only a couple of things on the role of economists. First, if you bring your economic experts to the Division, let them talk, please. It's something of a mystery to me why people hire expert economists and don't let them talk. One question related to the merger review process initiative that Charles James has announced [Ed. Note: See http://www.usdoj.gov/atr/public/9300.htm] and that the Division has been publicizing is, where do economists fit in? We are making an effort, and we have made this effort in the past, even before this initiative, to have our economists talk to your economists. One recent matter had the economists talking to each other without a legal chaperone, and we would like to do more of that.

You may have two sources of frustration in dealing with us, and we are working to fix them. Well, we may not be fixing one of them because it is beyond our control. That source of frustration arises when our economists talk to yours and you want to see our data. The problem is that "our data" often are not our data; they are somebody else's proprietary data that we've obtained. That has been a stumbling block: we'll have data and we can't share them; we're not legally authorized to do that. I recognize that's a source of frustration to you. It's something we're thinking about. It's something you'll run into, but you should not take it as though we're trying to hide the ball. We are willing to explain what we're trying to do in an investigation, and we have gotten, in some recent matters, good feedback from outside economists suggesting alternative ways for us to conduct our analysis.

Then we will go back and try those things with our data and do what we can.

The second source of frustration is that sometimes we do not have as much give-and-take as people would like because we are under so much time pressure. Sometimes I'd like to go talk to the outside economists, but I've also got to do my job, which is to get the investigation done. If I don't get this stuff done, we're in trouble. On that, I will make a plea, which may fall on deaf ears, for you not to pursue the strategy of giving us time to analyze the merger in dribs and drabs, because it wreaks havoc on our ability to conduct systematic economic analysis. If we're being told that we might have to be done in a week, then why bother getting a comprehensive data set? Why bother doing careful analysis? I don't think that works in anyone's interest. I understand why there's a legal strategy behind trying to do that to us and to string us along, but I think in terms of having us do good analysis, you would be better off, and we would be better off, if we both agreed to say, "Here's the plan, here's how much time you'll have," up front. That would give us more ability to work with your economists, if you have them, and to listen to you and take your analysis into account. I haven't been here very long, but in my brief time here, I have seen evidence that we do, in fact, listen. What outside economists have said has affected the way we've analyzed mergers. So, I think it's been an improvement all around.

AUDIENCE QUESTION: You talked about unilateral effects cases and suggested that they could often be viewed as two-to-one mergers. My understanding is that some unilateral effects theories involve the following type of situation: a large firm acquires a smaller firm that produces a differentiated product that is a relatively close substitute, but is only purchased by a small percentage of the market. The concern is that after the merger, the merged firm may raise the price charged for the product supplied by the smaller firm, while not changing the price charged for the product supplied by the larger firm. This price increase is profitable after the merger because many of the customers that stop buying the small firm's product start buying the large firm's product and, thus, are not lost to the merged firm. Before the merger, a price increase is not profitable because all of the customers that would stop buying the small firm's product would be lost to unaffiliated firms. After the merger, the price increase is profitable because many of the customers that stop buying the small firm's product are diverted to the acquiring firm's product. In this situation, would you consider this to be a two-to-one merger and, if not, would you still be concerned that the post-merger price increase might be material?

KATZ: Well, I think it certainly comes back to what your materiality standard is. Before discussing the treatment of price changes for limited product sets, I want to reiterate my earlier position on unilateral effects and market delineation. The hypothetical I was giving you, in which finding a unilateral effect would imply that the merger was two to one, was a hypothetical in which the materiality standard was such that all the prices had to be raised by 5 percent or more. In my view, that's an unrealistic hypothetical. I was offering it as a possible explanation of incorrect views that some people have about the Division enforcement actions.

I don't think we should have a flat percentage as a materiality standard in any case because I think you have to account for variations across markets. Moreover, I think it's also incorrect to say that the materiality standard should be that all the prices in the market must go up by the same percentage. It's clear, if you look at markets in any detail, that in a lot of markets, the ability to raise prices will vary by customer classes or customer type and, particularly in industrial markets, an awful lot of the prices are negotiated specifically with customers. So as we think through materiality, we're going to have to deal with the issue of whether it is across the board or not. So we have to deal with

whether some products and not others are affected, and the short answer is there are surely going to be cases where, yes, some products would go up in price and others wouldn't, and that would be enough for us to be concerned and to challenge a merger. It would depend on the amount of the commerce affected.

ANTITRUST SOURCE: You discuss some vague considerations relating to the materiality of the price increase, but you also suggest in response to a question about a merger between a very large and very small firm that the amount of commerce affected is also relevant. Have you considered any factors that might be relevant in deciding when the amount of commerce becomes "significant?" For example, one could look at the post-merger share-weighted average price increase. If that were very small (say, under 1 percent), but the acquired firm's price increase is predicted to be 10 percent, would/should the Division take action against this merger?

KATZ: Intervention could be appropriate for some circumstances fitting the fact pattern you describe. I don't think it is appropriate to focus solely on the *average* percentage price change. If one takes changes in consumer surplus as the appropriate welfare measure, then the competitive effect is approximately the percentage change in price times revenue for each separately priced product. Suppose that, absent any efficiencies, there are significant competitive harms associated with one segment, and no effects in others. It does not matter how big the unaffected segments are relative to the affected segment; there is a problem worth investigating further. Of course, before opposing the merger, one would want to take efficiencies into account to determine the net effects on consumers. This might involve balancing gains in some segments against losses in others. (I will sidestep the legal issue of whether one can make such tradeoffs.) In addition, one might want to consider litigation costs as a matter of prosecutorial discretion. Under a total surplus standard, the welfare effects would be measured differently but the principles would be the same.

PHILIP NELSON: Has DOJ adopted any standards that attempt to define "material effect" more clearly? At an ABA session that was held around the time the first joint DOJ-FTC Merger Guidelines were announced, I asked John Peterman, who was then head of the FTC's Bureau of Economics, whether a merger that was likely to lead to a 1 percent price increase raised sufficient antitrust problems that the FTC might intervene. John responded that he understood that the lawyers at the FTC, if they were sure that there would be a 1 percent price increase, would be worried about the merger, even though they were using 5 percent standard in their efforts to define relevant markets. Given this background, do you know whether today a 1 percent price increase would be viewed as material under the DOJ's interpretation of the Merger Guidelines?

KATZ: The Division clearly does have materiality standards. However, some of the concern about the DOJ's analysis of mergers using a unilateral effects approach is that we haven't done a good enough job communicating what these materiality standards are. Part of the difficulty in the communication is, again, that you really have to look at the specifics of the market. If you ask me if I could write down a hypothetical where a 1 percent increase would concern me, my guess is that I could write down such a hypothetical. Now, if you ask me whether I think I could write down a hypothetical that there was a significant chance I would see in my lifetime where 1 percent would concern me, that's a really different question.

NELSON: Some people, including some people at DOJ during the early years of the Merger

Guidelines, have taken the position that the small but significant increase in price that is used to define markets might be different for different markets. Specifically, I recall a speech by somebody within the Justice Department that indicated that it might be appropriate to use a 1 percent hypothetical price increase to define relevant markets in some industries, rather than the more conventional 5–10 percent price increase. Even today, you get in some of the FTC second requests interrogatories about customer responses to price increases that are less than 5–10 percent. Do you think it is appropriate to use a percentage price increase below 5 percent to define relevant markets?

KATZ: I don't know for what purpose the FTC is sending out Second Requests of the type you describe. However, it seems to me that market definition and analysis of competitive effect are two different issues. The way they're done by the agencies or done by the courts, they're two somewhat separate exercises. I mean, economists ask, "Why don't we just get to looking at competitive effects?" Done properly, market definition can be a useful discipline, but it is a different exercise than analyzing competitive effects. Now, in terms of the numbers, it is my understanding, and I'm not making this a commitment, that the Division, typically, for market definition, uses a 5 or 10 percent or higher standard. Certainly, staff has told me that these numbers are more like 15 percent, just thinking about different cases. I'm not aware of any case where we've ever done market definition based on some really small number. If for no other reason than that I suspect we'd have a hard time in court establishing that if it's 1 percent, it's not zero.

BARRY NIGRO: What sort of factors are considered in evaluating whether to use a 5 percent test, a 10 percent test or a 15 percent test? For example, do you tend to use one in a particular industry and another in a different industry?

KATZ: It may well be that the staff has enough knowledge that there are rules of thumb for different industries, but I can't say what the rules of thumb are. Certainly, it stands to reason that they could be different. If you just look at the price behavior in some industries, the prices are pretty stable over the years and then you talk to buyers who will tell you that 1 and 2 percent price differences are a big deal. There are other industries where price differences of 10 and 20 percent may not be that much or, for that matter, may change in the course of a year. So some of it is just putting it in the context of the industry.

My view, and it's actually the view that's expressed by the Merger Guidelines themselves, is that we've gotten carried away with thinking of the Merger Guidelines as a how-to manual for litigation. If the Merger Guidelines are supposed to be what they say they are, which are guidelines for giving insight into how the agencies will think about or decide whether or not to bring cases, then they are like a home-pregnancy test: you can do it and see what's likely to happen. But that's not the same as fully investigating a specific matter and litigating it. The Guidelines certainly provide a way to think about what's happening and what's likely to happen. They provide a short cut for advising your clients. When we're talking about deals that involve billions of dollars, and where millions of dollars are being spent on closing them, the actual analysis is much more detailed and, obviously, is very much case-specific. Personally, I can't see bringing a case where you told me "If the threshold for market definition is 5 percent, we should bring the case, but if the threshold is 6 percent, we shouldn't." We shouldn't be bringing that case because there's no way you can literally fine-tune things that much. So, I think the right way to proceed, when you actually get to specific matters, is in some sense like doing critical elasticities. You can do it with all of these numerical standards. You say, is there a market boundary that seems reasonably robust? If you tell me you've got very differ-

ent answers for 5 percent versus 6 percent, then the answer is no — that's not robust, and we ought to be worried about bringing a case based on it. One should be worried as a matter of public policy, and we should be concerned because you all would have a good time in court against us, if we had something that sensitive. So, in some ways, I think worrying about these numbers is a mistake in the sense that what you really want to do is look at the specifics of a market and say, "If I look at something and apply a 10 percent range, do I keep getting the same answer?" If the answer is "I don't," then I'd better understand why I don't.

The same thing applies with geographic market definition. My sense is that, at least in some cases which went to trial before I got the Division, too much has been made of the precise boundaries. Is it 100 miles or is it 104 miles? Again, that's the wrong question. Where is it that your view of the geographic market really matters? Let's not find whether the precise boundary is 100 miles or 104. Let's find out if when you say it's 100, you get one answer about competitive effects, but when you say it's 104, you get a different answer—then we had better worry. What's happening in between those values? Which is closer to correct? We ought always to remember that, in the end, what we are worried about are competitive effects and so, if you're not getting a clear answer, we want to ask when does the answer matter? Is there a physical size of the SSNIP that matters because we're going to get a very different answer for our competitive analysis? If the answer is yes, then we're going to have to drill down on that. To circle back, what I said is the Merger Guidelines are a useful way for how to do things "quick and dirty," and they provide a useful overall framework for thinking, even when you get into detail. But there's a lot more to do when you start drilling down on a specific case.

NIGRO: Maybe I'm missing something, but for the various standards for materiality, aren't we talking apples and oranges? You use one SSNIP to define the market. Then, after the market has been defined, hypothetically you could look at this merger and determine what anticompetitive effect might occur. There may be a harm associated with the merger and the number may be different than the SSNIP. It may be smaller and you still might want to go after it. So are we talking about two different exercises?

NELSON: I agree that we are talking about two different exercises. I was trying to clarify two things. First, I was trying to clarify that after the agency has defined the market, at least at the FTC, the agency may be concerned even if they think the post-merger price increase will be small, such as 1 percent. Second, I was trying to clarify that the agencies don't always use a 5–10 percent SSNIP when defining the relevant market. Even today, within the last year or so, I've seen FTC interrogatories that are assuming SSNIPs that are well below 5 percent. I was wondering if DOJ uses SSNIPs below 5 percent in some of its investigations.

AUDIENCE QUESTION: What are your thoughts about vertical mergers?

NIGRO: In answering the question from the audience, could you answer that question both generally and with respect to the telecom industry, because I know you just spent time with the FCC and you thought about these issues in the context of that particular industry?

KATZ: I will give you a personal view. I am open-minded to both efficiencies and possible adverse competitive effects in vertical mergers, so I think we need to look at them. That said, it's fair enough to say that they are hard to think about. Some of the theories are what some people might characterize as delicate, and the analysis of vertical mergers is really fact-intensive. In general, I'm not going

to be able to give you a cookbook for how to investigate matters, and certainly not for vertical cases. I think there are facts and theories to examine. I can imagine our bringing cases. We certainly see a lot of claims about adverse vertical effects. While I am open-minded, I have to say that most of the stories I've heard so far were bad stories, and we rejected them all. But I'm open-minded, and I think the Division is, too.

NELSON: How do you evaluate materiality in the context of a vertical merger? Is the analysis different from the analysis in horizontal merger cases?

KATZ: It may sound too much like there's a single standard. What we do is weigh a bunch of different facts about the structure of the industry, how it behaves, and our confidence in the projections of effects. You could hypothesize a vertical type of competitive effect that may be harder to foresee and, thus, we'd be more cautious, and that would probably be a fair characterization of how I would proceed. But it's not like we say, "Here's the vertical and here's the horizontal." It's more that we assess whether we think these effects are going to be adverse to consumers and whether we have confidence in our projections.

NELSON: During the Reagan Administration, vertical restraints guidelines were written. When Anne Bingaman arrived, she repealed them. Have you or other people in the new administration looked at those standards and determined whether to use them or some similar standards?

KATZ: This may be revealing some sort of state secret: you need to have some market power somewhere or we're not going to be concerned. You don't need guidelines to tell you that, whether the guidelines are now out there, actively blessed or non-actively blessed. I don't know what else to say about that.

NELSON: Are there any rumblings about issuing new vertical guidelines?

KATZ: Not from me. We don't have any sort of announced effort to revisit those guidelines or put them out.

AUDIENCE QUESTION: How would you react to a simulation analysis that included efficiencies in the analysis, but still showed that there was a post-merger price increase?

KATZ: First, I would be pleased that you integrated the efficiencies analysis into the simulation because, as a matter of economics, it's a somewhat peculiar notion that you analyze competitive effects and then separately look at efficiencies. Particularly if one adopts the view that we're taking some sort of consumer harm as the welfare measure as opposed to overall economic efficiency, then you should integrate the two. Ultimately, you're asking the question of what happens to consumers from the net effect of all of these forces, and efficiencies are not some separate effect that takes place in isolation. They are part of the overall response to changes in the control and ownership of the firms. You should do that as an integrated analysis, and that's essentially what we do. You can talk about doing it in steps, but in the end, the simulation will push you toward an integrated analysis, and that is the right way to do it. You can build changes in firms' costs due to efficiencies into simulations, for example. Sometimes you think you've built everything into the model that will fit, but then you should do things in addition to the model, like try to understand how people in the industry think about

Many merging parties seem to have given up trying to claim efficiencies, much to my disappointment. The difficulties arise from the fact that the efficiencies are projections, and firms often appear to have limited documentation for their projections.

the industry. For instance, you need to understand the important effects that a one-shot model is going to miss; you should ask questions about innovation and strategic investment. You also want to ask yourself whether that pricing model fits the way the industry behaves. There are a lot of things that provide reality checks for a model. Do an old-fashioned case analysis and case study of the industry and see how the model looks in comparison—look for the factors that you've missed. Ask if there is anything one can do in terms of time series or cross-sectional studies to see whether the model generates predictions that are consistent with the actual experience of the industry. Also look to things less formal, not necessarily econometrics. For instance, are there any natural experiments that have happened in the industry in the past? Have there been similar mergers in the past? It's all common sense. Given the type of deadlines we're under, we sometimes need to remind ourselves to understand deeply how industries and institutions work on a practical level, and to make sure our models fit.

AUDIENCE QUESTION: On the question of efficiencies, are there particular types of economic analysis that you find helpful in testing efficiency claims?

KATZ: Yes. I'll give you my personal opinion on efficiencies. Many merging parties seem to have given up trying to claim efficiencies, much to my disappointment. The difficulties arise from the fact that the efficiencies are projections, and firms often appear to have limited documentation for their projections. We often get simple spreadsheets that show how much money would be saved if all sorts of costs went down by, say, 3 percent a year for ten years. In some cases, it appears there is not a whole lot more to the analysis than that. But where did the percentage reductions come from?

There are things that you can do that are helpful. If you're going to submit these parametric analyses, which in some ways are rules of thumb, tell us the basis of the rule of thumb. Obviously, the most helpful thing is if someone can come in and tell us "We merged before, here is what happened, and here's why we can expect to repeat the cost savings." Certainly in telecom there are possibilities for this sort of procedure because there are firms that merge repeatedly. So, one thing we would like to see is what happened in the past and what the experience has been. What sorts of costs were reduced? Now, I recognize that there may be business concerns when the cost analyses have been prepared by outside financial advisors. Investment banks may be reluctant to share how they do their analysis because they worry about it harming their own business. I respect the fact that they don't want their trade secrets to leak out. Nevertheless, I think we need to see more back up. We need to see more about where the numbers came from because the stuff I tend to see—and tended to see as an expert before I was in the Division—was: here's a spreadsheet, here are the cost savings, and look how big they are.

Then there is this process of saying "That doesn't really sound like it's specific to the merger." Even that process can be reduced to staring at the spreadsheet and reading the headings on the columns and rows, asking, "Where did this come from and what's really going on?" I think the only thing to do is get behind the cost savings projections. I would like to see parties bring in more information so that we could treat this stuff seriously.

NELSON: Does DOJ ever go back and ask, "Why did we lose this case?" More specifically, do you determine if you lost because your theoretical analysis was rejected? Do you go back to see if the facts that came out at trial are different from the facts that were believed to be true when the matter went through the DOJ front office?

KATZ: Before addressing the question, let me first make another point regarding the use of simulations and whether we find unilateral effects everywhere and then object to a slew of proposed mergers. We recently had a matter where we ran econometric studies and simulations—words that strike terror in the hearts of merging parties everywhere. The simulations produced small, but positive projected price changes. Even though the simulations projected adverse competitive effects, those results figured in the decision closing the investigation. We had not yet done the analysis with the projected efficiencies incorporated. The preliminary projections told us that it looked okay to close the matter without conducting a major efficiencies analysis. This example demonstrates that it is not the case that any time we find a projected positive effect on prices, off we go to challenge a merger. We have reality checks.

Now, let me return to the question of whether we go back and look at why we have lost in court in those matters where we unsuccessfully litigate. Our litigation performance is something we look at, and is something that we've looked at over a number of years. Different front offices do different things, but it's certainly something that we look at and I look at. I haven't done a comprehensive study yet, but I am planning to look at it in much more detail. There are times when we have not done a good job in court explaining, for example, how we think about market definition. That's something we need to work on, and I plan to work on it. As part of our internal process, it comes back to making sure we have a coherent, common sense story. As a matter of policy, if we don't have a story like that, it's going to make us nervous as to why we are bringing the case. And, of course, if we ever run into a situation where we went into court and it turned out we were completely wrong about what was happening in the industry, a lot of people in the Division are going to want to know why we were surprised. Certainly, the members of the trial team will take an intense interest, as would others.

NELSON: The FTC has done some impact evaluations where they review what happened in markets where they issued orders. Is there any thought about having the DOJ look at some of its historical orders?

KATZ: What they did was go back and look at the mergers they were concerned about but let go through, and ask whether they were right to be concerned, because that would provide information. My understanding, from talking to economists, is that our ability to do that is limited because, in terms of how we get data from people, it would be hard for the Division to do it. The Federal Trade Commission is in a much better position than we are to do retrospective studies, so we have to talk to them about doing that. It's certainly something that we'd be interested in doing, and I would love for people to voluntarily tell us what happened with prices, but our ability to collect the data is limited. We are thinking about various ways to try to get around the data limitations because we should test ourselves and we should go back and see how we were doing.

NELSON: I take it from your answer that there probably isn't any major shift in how you're thinking about the types of fixes you'll accept to solve problems raised by some mergers. Is it true that the policy of the preceding administration has pretty much been adopted by the current one in terms of the fixes that will solve issues raised by mergers?

KATZ: The only thing I can say on that is that we haven't done any sort of major economic study to rethink DOJ's approach to fixing mergers.

AUDIENCE QUESTION: With the increasing number of announcements that you will review con-

summated deals, how, if at all, does your economic perspective or study change when you look at small deals that are not HSR reportable?

KATZ: Well, the short answer is I don't know if it does. I mean, I haven't thought about it. Off the top of my head, I can't think of something that would be different, other than the scale of it. I haven't got anything in mind. It's wrong to think that we don't look at small deals and consider whether to challenge them, although I think we have some problems getting the data. The Division can challenge, does challenge, and has challenged things that fall under the filing requirements.

AUDIENCE QUESTION: You mentioned at one point during your discussion of unilateral effects analysis the effect on things other than price. I'm curious about how you analyze a unilateral effects case that does not have anything to do with price, whether it's an innovation question or a further products differentiation question.

KATZ: The analysis is the same as with price. If you thought we were just doing unilateral effects with simulations, you would think we were taking a narrower view than we actually do. Even if we're thinking about price, we try to understand the economic incentives of the firms to increase price and ask how those change with the merger. We would do the same thing with product quality or with innovation. We might ask if the reason one party was undertaking some program to innovate, for example, was explicit concern with the other party because there was some dimension along which the parties were the two primary competitors. So we'd basically conduct the same sort of analysis. We would ask, "Is there some reason to think that, within this broader market, this particular behavior is driven specifically by this other firm?" And if this behavior is important enough, and if we understand it well enough, then that would be the basis for being concerned about harm to competition.

NELSON: Do you think about competition between innovators as being similar to competition involving potential entrants? In other words, one firm has a product in one part of product space, the other one is innovating and might be moving or introducing a second product in another part of product space, and so you'd be thinking about it? For example, maybe both have heart drugs, but there are side effects and so one has a heart drug with one cluster of side effects and they're working on something that will reposition it and create a new drug that will have the same side effects as this merger partner, in which case you might be more concerned about that merger than you would be if that innovation effort wasn't ongoing.

KATZ: Certainly as a matter of economic theory you could have a case where you were worried about potential repositioning, driven by innovation, but that might be a hard case to litigate. Typically, potential entry cases are difficult, and it seems to me that this case would be doubly hard. But it's certainly something we could and, I think, would examine and analyze. If we thought we had really good evidence and a significant competitive effect, then we would bring the case. But there are a lot of hurdles you have to get over to get to the point of saying we have strong reasons and good evidence to believe this. I think the more likely scenario would be that you would see a firm with significant projects clearly aimed at the other firm, and that we would be worried about what would happen to those projects. It would be part of understanding the structure of the market and why we believe that these firms are particularly close to each other. Among some people complaining about unilateral effects, I'm sure there's a suspicion out there that we would say: "Well, these are the two firms merging. It would be nice if they were the neighbors and we could bring a unilateral effects

case; therefore, they must be neighbors, so go figure out how." We don't do that, and we need to make clear what we do instead. However, with repositioning, there can be a danger that you're either going to do that unconsciously or it's going to look like you're doing it.

ANTITRUST SOURCE: The predicted price effects of Bertrand (differentiated product) models can (and frequently do) differ substantially between models assuming constant elasticity of demand and linear demand (with the former predicting much larger price increases). In the absence of sufficiently strong econometric way of distinguishing between those two alternatives, any ideas on how to choose one or the other?

KATZ: The fact that algebraic models can be sensitive to assumptions is one of the reasons that we must always test our models against reality. In addition to formal statistical studies, we would look for past episodes in the market to see what light they might shed on what would be likely to happen in the matter under consideration. We would also look for other evidence of how the market works. For example, customer and supplier interviews, as well as documents, might provide qualitative senses of the character of demand.

AUDIENCE QUESTION: Looking back at your time at the FCC, do you think you're working with a different kind of standard today than when you were looking at mergers at the FCC? If so, does this difference affect your analysis?

KATZ: I'm not sure it affected the economics so much, but, yes, there was a different standard because the FCC has a broader, public interest standard. Certainly, when you examine media markets there's an additional set of considerations that come into play at the FCC because the question involves issues of source diversity—going beyond being concerned about the commercial aspect, to being concerned with the effects on democratic society. Those sorts of issues don't arise in the analysis we're doing. In that sense, there clearly is a difference. Another difference you see, not so much in the analysis of the mergers, but certainly when you're thinking about remedies, is that the Division generally does not want to be in the business of regulating industries and does not want to have a consent decree getting into the guts of the industry and taking a lot of work to oversee. The FCC is in that business, although it may not like it. The FCC clearly has a broader range of tools and things it can do for dealing with a merger. That affects how you think about the remedy, and some of that can feed back into your analysis of the merger itself.

ANTITRUST SOURCE: As is well known, your research on network effects has significantly influenced how economists approach antitrust in markets characterized by network effects (e.g., *MCI/Worldcom*, *Microsoft*). Do you see any need to revise the rules of the game (or reorder the rules) in matters involving network effects? Are the Guidelines still relevant for those purposes?

KATZ: I don't think network effects create the need for a "new antitrust" or even for new merger guidelines. For one thing, network effects have long been important, and we have made it this far. Second, in many ways, network effects are just another form of increasing returns to scale. That said, I do think that standards and compatibility decisions raise interesting new dimensions of conduct to examine, and the importance of consumer expectations about future sales certainly adds to the complexity of analysis in novel ways. In the end, the possibility of network effects is another reason that we must examine the institutional and informational structure of markets in detail in order to

understand market behavior and competitive effects as well as we can. As in all of antitrust, analysts should be careful—and humble.

AUDIENCE QUESTION: Are there circumstances in which the Division would consider some sort of price regulation to compensate for a loss of competition or a substitute of competition?

KATZ: I'm not going to answer that question because the issue has already been raised publicly with regard to the proposed EchoStar-DirectTV deal; the question is too close to an actual case that's going to be in front of us. I will tell you we would look at the regulatory regime that's in place as part of understanding industry structure and understanding where things are. So certainly if you're in a case where there was price regulation at the time of the merger, we would take that into account in thinking about the competitive effect of the merger. The open question, which, as I said, I will explicitly avoid answering, is what if we were told in some merger, "Well, don't worry, there's this other regulatory body that's going to take care of the prices. They haven't yet, but they're going to." As I said, that is an issue we may well be confronting in the future.

NELSON: You indicated quite strongly that when you get into an econometric analysis in the context of a merger, you are encouraging parties to have some sort of dialogue and you indicated that it would be, in some cases, difficult to share the data because the data are proprietary. Would you be willing, even in those contexts, to go as far as sharing the functional form, the parameters, the econometric estimation approaches that were used, and the signs and significance of the coefficients? Even without sharing the values of the actual parameters or giving the data, there is a lot of information that could be shared. Would you be willing to open up the DOJ economists' analysis in ways that protect the confidential data, but provide the parties with detailed insights into the econometric studies that are being done by the DOJ staff? The FTC historically has not been willing to share this type of detailed information about their econometrics. As a result, it is somewhat unclear that the agencies are willing to share this type of information.

KATZ: I could be wrong because I wasn't in on all the details, but my understanding is that we've done that. I can't comment on the FTC, but the Division had a matter where I believe we told the parties everything except for giving them certain confidential data from third parties. The parties had their own data set on which they basically reran our regressions and then said, "Well, here's how we think you should change them." I remember seeing tables comparing their coefficients and ours, and we tried to tell them as much as we could about what we were doing.

NELSON: You were talking about looking at coordinated effects cases and looking at the indicia for tacit collusion (as opposed to explicit collusion). It has been my experience that some staff attorneys look at a history of whether there hass been explicit collusion in the industry to assess whether tacit collusion is likely in the future or not. As an economist, this approach hasn't always struck me as a particularly sensible thing to do because, while you may get some information about the likelihood of collusion from explicit collusion cases, it may be that what led to explicit collusion is the fact that tacit collusion is unlikely to be successful, given the market's characteristics. Do you think a historical record of explicit collusion is relevant to the analysis of a merger?

KATZ: I think a record of historical collusion is a relevant factor. However, I would want to understand how the collusive scheme worked. This has come up in some investigations I've been

involved in. I want to know how this scheme worked, how broad did it have to be, how much detail, because, as you're saying, so many things can cut both ways. Understanding the scheme and what happened can give you a lot of insight into the workings of the market. One argument is that you've seen collusion is feasible, because they have done it. Then, the counter argument is that they had to do it illegally, so that shows how hard it must have been to do it tacitly. If you look at the actual workings of the scheme (see what the parties did and didn't know, see what information they might or might not have shared, see whether they allocated customers or colluded through prices), I think you can understand the workings of the industry better, but you don't want to do it by asking only whether they colluded or not. You want to do it by saying: "They colluded. Let's understand what happened then. Did it attract entrants? Did they have to take on new members, for example?" It's a good natural experiment. If people tell you entry is really easy, and then you say, "Well, that's interesting, but fifteen years ago the technology was the same and you guys colluded and you raised prices 20 percent, and nobody entered," how is that consistent with entry being so easy and holding prices to competitive levels? Now, that's not the way Phil was describing the investigatory process, which may be an accurate description of past practice. I described what we do now. I can't speak for the past.

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AUDIENCE QUESTION: You talk about how it's difficult to evaluate efficiencies or that parties are not making a strong effort to adequately demonstrate efficiencies. That was discussed in the *Heinz* decision and it was an issue that came up in a Newport News transaction. How do you go about determining when efficiencies are strong enough or adequate enough to outweigh the loss of competition in a deal that's going from three to two, and can efficiencies ever justify a merger from two to one?

KATZ: That's a theoretical and a practical question. For the two-to-one merger, the answer, in theory, is yes. As a practical matter, I don't know. If you have an example, I'm happy to look at it; the staff would look at it and think it through. I think it's fair to say that even if we conclude that this unnamed merger is a two-to-one, we will think about it. How it will turn out, we'll have to see. We also have to examine whether it's really a two-to-one.

NELSON: One of the hot issues over the years has been the interface between intellectual property and antitrust. What things has the Division been thinking about doing to clarify its policies in this area?

KATZ: There are attempts in the sense that various deputies have gone out and spoken about it. I'm not sure if Charles James has specifically addressed that or not. One of the things we've said is there's no "convenient facilities doctrine." I think part of the problem in dealing with intellectual property is that people tend to think it doesn't really cost you anything if somebody else uses it, and it would be nice for them if they could use it, so we should let them do that. So, in that sense I think you could say the current version of the Justice Department comes out pretty strongly in favor of the intellectual property rights and doesn't see that you have a generic duty to deal or that there's something illicit about getting patents. We understand—and the Intellectual Property Guidelines have said—that while licensing is a good thing, you don't have an obligation to grant a license to anybody who wants one. Of course, you can abuse the licensing process, and we'll look at it, but it's going to be within the confines of antitrust law, and we're not going to say that somehow intellectual property creates extra obligations on you.

AUDIENCE QUESTION: What published articles, not working papers, in the economics or law and economics literature have you read over the past three to five years that have most influenced your views on Industrial Organization theory ("IO") and antitrust law?

KATZ: I can't think of anything that's had a big influence on how I think about it. I will tell you about what I read. I have a stack of various appellate court decisions. I've been spending my time reading through those because, in the end, even if a matter doesn't go to litigation, we're supposed to be enforcing the law. So I spend a fair amount of time trying to get a much sharper understanding about how the courts think about antitrust economics, which is not always in accord with how economists think. Academic economists often say the courts don't really understand us, and then off they go to do their thing. Academic economists—if we're going to make progress in this area—need to understand a lot better how and why the courts think about antitrust issues. So part of what I've been doing is trying to get a much better sense of the mindset of the courts. Economists probably should have more sensitivity in thinking about the theoretical approach. Economists should think about the real problems the courts face. In academic research, one can write down a formal model and say, in this model, this practice has these effects. Then you can write down a second model in which the practice has different effects. You have two completely rigorous analyses. The problem is, the court has to know, when it is confronted with a cross-section of cases, is it likely to be in this world or that world? If I take a given action, I know that in some models what I'm going to do is a good thing and in some it's a bad thing. Well, how do I know I'm right more often than not? Economics, in general, hasn't done a very good job of answering that sort of question. Academic economists tend not to be very good at giving good rules of thumb. We tend to be very good at taking a particular thing and analyzing it to death. That's one of the reasons for not pointing to an individual article that I would say has really shaped how I think about IO and antitrust law. If there were an article that said "Here's how we should balance the realities of what actually happens either in investigating a matter or litigating it," then that would become the article, but I haven't seen one like that. Articles tend to present a specific model, a specific topic, and provide incremental information.

So I spend a fair amount of time trying to get a much sharper understanding about how the courts think about antitrust economics, which is not always in accord with how economists think.

AUDIENCE QUESTION: What appellate cases have you read?

KATZ: I don't think I could single one out. Basically, I'm just trying to read strings of cases. For instance, I've been reading a string of decisions on exclusive dealing and working backwards on that, and I have been reading a group of cases on predation. I'd have to say that detailed economic models pretty clearly say that the way many courts analyze predation is incorrect. For example, the search for the "right" cost floor is wrong because there isn't a right cost floor. For any cost floor you can come up with, I can come up with a model in which it's the wrong floor. So the real question we face is: What's the right rule on average? Unfortunately, I don't think economists have taken a really good look at that, although some academic economists have taken this on in a separate law review literature. I have read other cases as well, like *Stearns Airport Equip. Co. v. FMC Corp.*, (170 F.3d 518) in which I learned about the differences in electromechanical and hydraulic jetways. It's not as if I look at one particular thing that has changed my way of thinking about stuff, if for no other reason than the decisions tend to be so incremental until you go back forty years or so.

AUDIENCE QUESTION: Could you ever have competitive injury or anticompetitive effects in an attempted monopolization case based on predatory pricing? As an economist, would you say that you could never have anticompetitive effects in a case involving predatory pricing by a firm whose

market share is such that a monopolization case cannot be brought, so an attempted monopolization case is brought, instead?

KATZ: As a matter of theory, I would not say "never." I can write down a model in which a firm has a small market share and can engage in predation that harms consumers. That's a different question than asking if I can point to any markets that actually look like that. Again, it's something I'm certainly not going to rule out as a matter of theory. I'm fond of saying that there is no general theorem in antitrust economics except the one that says there are no other general theorems. Hypothetically, there are situations in which almost anything can happen and that's one of the problems I have with some of the claims that have come out of the Chicago school of antitrust. The good thing about the Chicago school was that, compared to what was being done before it came along, it increased the level of rigor and analysis. The bad thing about it is that it pushed the completely false notion that you could have a two-line proof that there was no such thing as predation. Things are just too industry specific and too fact intensive. Never say never; but that said, it's one thing to come up with a theoretical curiosity, and it is another really to build a case.

You're going to keep getting these on-the-one-hand/on-the-other-hand economist answers, but I think that's really the right approach. ●