UNITED STATES OF AMERICA

FEDERAL TRADE COMMISSION - DEPARTMENT OF JUSTICE

HORIZONTAL MERGER GUIDELINES REVIEW PROJECT

Fourth in a Series of Five FTC/DOJ Workshops

Thursday, January 14, 2010

9:00 a.m.


Stanford University
616 Serra Street, Encina Hall
Bechtel Conference Center
Stanford, California 94305
Panel 1: Direct Evidence of Competitive Effects: 3
Panel 2: Price Discrimination and Large Buyers: 75
Panel 3: Unilateral Effects: 145
Panel 4: Dynamic markets and Innovation: 200
MR. ROSSTON: Good morning. I'm Greg Rosston. I'm Deputy Director of the Stanford Institute for Economic Policy Research, otherwise known as SIEPR. And we're happy to have you all here.

SIEPR is a research institute at Stanford that looks at all aspects of economic policy research, from development to the California budget and the U.S. budget, but also competition policy issues.

And so we're real happy to have the DOJ and FTC
here today to hold the workshop on Merger Guidelines. It is, I think, quite fitting that it's held here at Stanford. I first met Carl when we took an antitrust class. He was visiting at the Center for Advanced Studies. And we sat in on Bill Baxter's antitrust class to learn about antitrust.

And given that Bill was so famously involved in the Merger Guidelines, it's appropriate to have this back here at Stanford. But I don't want to spend too much time talking about things here, as opposed to letting you guys hear the experts on this stuff. So I will turn it over to Carl and Joe to tell you about the day.

PROFESSOR SHAPIRO: Well, let me also welcome you. I'm Carl Shapiro, the Deputy Assistant Attorney General for Economics in the Antitrust Division. Joe Farrell, the Director of Bureau of Economics at the FTC, is next to me and will speak in a moment. Since Joe and I are both on leave as professors at Berkeley, we thought it would only be fair to throw a bone to Stanford and have this workshop held here.

(Laughter.)

PROFESSOR SHAPIRO: Well, I have to say, coming from weeks of 20-degree weather in D.C., and coming down to the campus here this morning it was extremely refreshing and pleasant. And I felt like walking around the campus all day
long, but I will be here with you.

Let me just put today's workshop in context briefly. We announced, the two Agencies together, that is, announced in September that we'd be reviewing the Merger Guidelines and possibly revising them. We got about 50 public comments filed by November, which is when we'd asked for them by. Many very insightful, and we're appreciative of that.

This is the fourth of five workshops that we're holding. The remaining workshop is on January 26th in D.C. at the Federal Trade Commission. And we have been getting wonderful input from those workshops, the three that we have held, and look for more of that today.

Internally at the same time we are reviewing our own procedures, how merger investigations are conducted at both Agencies, and setting that against what the Guidelines say and what the Commentary from 2006 says, which is another important document here because it provided a lot of additional information about merger review.

And part of what we're looking at here is, if we do revise the Guidelines, to what extent we can port in material from the Commentary selectively, not -- the wide Commentary, one of the things it does is through a number of cases that are listed and put in the structure of the Guidelines, the outline of the Guidelines.
We don't intend to do that, but there is a Commentary around those cases that can be quite useful in indicating things that are done at the Agencies that are not so clear from the Guidelines themselves. So that's something we'll look for the panelists today to perhaps touch on, where elements of the Commentary can be useful in the respective areas of the different panels.

Okay. So let me just turn it over to Joe. Thank all of you in advance who are going to be participating or for coming. Additionally, thanks Commissioner Rosch for coming. He's going to be moderating the first panel, and it's really wonderful that he's here to do that. We have been very pleased to have a couple of the other Commissioners, Pamela Jones Harbour and Bill Kovacic, moderate other panels at other workshops; as well as the likes of us, Joe and me and our ilk. So, Joe.

MR. FARRELL: Thanks, Carl. And thanks again to Stanford and SIEPR for having us. Carl said most of what I had to say. So let me just say a little bit more along one of the lines that Carl already raised.

The Merger Guidelines Commentary was put out in 2006, which is very recently relative to the age of the Horizontal Merger Guidelines themselves, which are now practically an adult.

In my mind, at least, the goal of this project is
that people basically agree, I don't think there is much
doubt, that the fundamental issue in Horizontal Merger
review is will the merger harm consumers. And the process
is all about, well, what's the best way to investigate, find
out, and prove the answer to that.

So it's kind of an open-ended inquiry that is both
about economics and about process at the same time. In my
way of thinking, that's what we're here to discuss and try
to figure out, what's the best way to summarize or to
describe what is the best, and most useful, and also the
most used ways of analyzing that question. Thanks very
much.

So with that, we'd like to welcome the first
panel. As Carl mentioned, the first panel will be moderated
by Commissioner Tom Rosch. Thank you.

COMMISSIONER ROSCH: Let me introduce, first of
all, Mandy Reeves, who is my attorney advisor, and is a
wonderful helpmate on all of these projects, in particular
this one. And then the panelists, a very distinguished
group of folks, and I think we're all honored to have them
here.

On my far left is Jeremy Bulow, who's the Richards
Stepp Professor of Economics here at the Stanford Graduate
School of Business. Among his many accomplishments,
Professor Bulow served as Director of the FTC's Bureau of

Mark Lemley serves as the William H. Neukom Professor of Law here at the Stanford Law School. He's also a founder and partner at the firm of Durie Tangri, LLP. Mark has previously testified before Congress, the FTC, and the Antitrust Modernization Commission on issues of antitrust and patent law.

Lawrence Wu is an old friend, as well as somebody that I hired quite frequently as an economist when I was in private practice. He's the Senior Vice President of NERA Economic Consulting in San Francisco. He's submitted analyses to the FTC, the Antitrust Division, and a variety of international competition authorities. And prior to joining the NERA, Lawrence served as a staff economist in the FTC's Bureau of Economics and testified in a number of FTC cases, including, I think, Poplar Bluff, as I recall.

Kathy Foote is another long-time friend and erstwhile colleague at the McCutchen firm in San Francisco. She's been a Deputy in the Attorney General's Antitrust Section in San Francisco since 1988 and is currently the Antitrust Chief. Prior to joining the state AG office she served as Associate Dean at the University of San Francisco. Let me make a couple of comments to sort of kick this off and then I'm going to turn to the panelists, because it's really their show and I want to learn from
them.

The first is that I am deeply engaged in this project and, indeed, our office is. Right alongside Carl and Joe, who were the sort of people who came up with this idea of revising the Merger Guidelines, ever since that time I have been very deeply interested in what we're all about. And I think, number two, we can learn a lot from what has happened with respect to prior panels on this subject. And let me make about five major points based on the testimony that we have heard to date from those prior panels.

The first is that this panel arguably is misnamed. It's a misnomer to call it a "direct effects" panel. Really what we're talking about here is everything except the structural case, which is currently upfront in the Merger Guidelines, 1.0, if you are into numbers, that focuses on market definition and concentration in the market.

What we're going to be discussing is everything except that. But we will probably be discussing structural to a certain extent, as well, because market definition and concentration as has been noted in prior panels, particularly by Professor Whinston; that is another way, basically, of putting together a demand curve.

And certainly consumer demand is one of the salient factors to be taken into account, not only in
unilateral effects analysis but, as he pointed out in a prior panel, in coordinated effects analysis, as well. And so for that reason, it is important that we retain to some extent the demand-curve function in the Merger Guidelines, because that's one of the things that people focus on.

Now another reason for retaining that in some form or another at some point in the Merger Guidelines is that the outside bar -- and this is very much inside baseball, by the way. Merger law has its place in the West Coast, but not nearly as much as it does in Washington, D.C.

That is what antitrust law is in Washington. It's about mergers. And they cry out for certitude, for some kind of safe harbor. And they think that that 1800 figure, HHI figure, gives them that safe harbor. I kind of agree with that and yet I disagree, because we have to, on the one hand, balance the question of certitude, predictability that the outside bar and their clients are crying for, against fairness to the Agency, because we have to try these cases. And frequently, if and to the extent that market definition and market concentration are the be-all and end-all of antitrust analysis, I think we're doing a disservice to the outside bar, because that's not the way that the agency staffs look at these matters at all, number one.

Number two, I don't think we can blind ourselves to the fact that antitrust courts that are trying these
cases look to the Merger Guidelines as kind of an indication of what the law is. And so if and to the extent that our list of considerations starts and stops with market concentration and market definition, we are being unfair to the staffs of the agencies, as well, that have to try these cases.

So it's a balancing act on the one hand between predictability and certainty on the one hand, and on the other hand factors that go beyond simply market definition and market concentration. I will personally look forward to what the panelists have to say about how to strike that balance. It will be very interesting to me.

Third, the third lesson we learned is that we can waste a lot of time talking about -- consummated mergers in this panel, and we shouldn't. We shouldn't because, using economics lingo, that's the ultimate in natural experiments. You don't have to predict very much. You can take a look at what has happened to prices, what has happened to other factors as a result of the transaction. And so I kind of wonder whether and to what extent we ought to treat consummated mergers differently than unconsummated mergers, even in the Merger Guidelines. There is less reason, really, to spend a lot of time defining the relevant market upfront, developing concentration ratios, et cetera, for consummated mergers than there is for unconsummated mergers,
but we really have to make some kind of a prediction with respect that, as Joe said and as Carl has said to me privately, the ultimate question, which is what's the effect on consumers. So I will look forward to that being discussed by our panelists, as well. Finally, I kind of wonder whether -- and this is kind of a segue, if you will -- I kind of wonder if we haven't focused too narrowly on consumer welfare, on the effect of a transaction on consumer welfare.

We focused, in large measure, on price effects. Number one, because that's the easiest measurement to make and, number two, because we have been taught by the Chicago School, as explicated by Professor Bork repeatedly, that price effects are king. I don't think that that's necessarily true.

It's well-recognized today that there are a number of other aspects, dimensions, if you will, to consumer welfare other than price. And one of those is innovation and another one of those is quality. I like to think of it as a continuum and, really, to take a look at what the impact of the transaction is on consumer choice, which is what I think it's all about.

And, again, I invite the panelists to talk about what tools are available to us today for measuring factors other than price and, particularly, factors such as consumer
choice. And so I'll look forward to that, as well.

Now the format that we plan to follow is as follows. We're going to have remarks by each of the panelists. Then we are going to have questions by each of the panelists of the other panelists, and finally we will turn to you. And that's not to say that you are the final, that we're giving you short shrift, because we certainly don't mean to do that.

And, to the contrary, I think you kind of put a capstone on our discussion today. But, in any event, that's what we plan to do. I don't plan to screen the questions. So please try and not ask questions that read particularly on your area of interest or on your clients' area of interest, and try and broaden it out a little bit to discuss some of these very salient matters that I have mentioned, and others, as well.

I did mention Carl and Joe, to begin with. And they certainly were the authors of this effort. But Greg has been a good friend over the years, as well. He's been a good friend particularly of my son, who's down in Silicon Valley working here. And I have had the pleasure of coming out to Stanford to talk to his classes from time to time.

So thank you very much, Greg.

And with that, I'm going to turn it on over. Why don't we just start here? Lawrence, do you want to kick it
PROFESSOR SHAPIRO: Before we do that, let's just
-- I don't think anyone's actually going to forget, but
there is a name tag here.

COMMISSIONER ROSCH: Okay.

(Pause in the proceedings at 9:32 a.m.)

MR. WU: Well, thank you for inviting me to speak
today. I wholeheartedly support the FTC and DOJ's efforts
to protect competition and consumers, and the Agencies'
efforts to develop an antitrust policy that reflects and
appreciates economic principles and analysis.

Now three things I want to say today. And that's
it, just three things. But three things that go straight to
organizing principles and three things that go to what it
takes to evaluate and develop compelling and credible direct
evidence of competitive effects in merger cases.

So here's the first thing, which I will put in the
form of a question. When we think about evaluating evidence
on competitive effects, what should we focus on?

My answer here is that our unified principle ought
to be based on increasing consumer surplus or preventing a
loss of consumer surplus. And that means looking at price
effects, but it also means looking at output effects and
innovation. It's natural to look at price effects as a
proxy for consumer surplus. Consumer surplus falls when
prices rise, all else equal. Plus price is a natural way of integrating the efficiencies analysis.

So a merger of two close competitors could lead to higher prices, but with efficiencies prices could fall. What tends to get short shrift, though, are output effects and innovation. But if our unifying principle is consumer surplus we can avoid that problem.

So, in general, an increase in total market output will correspond to an increase in consumer welfare. Innovation is just as important. As my colleague, Greg Leonard, and I pointed out in our comment to the Agencies, these output enhancing efficiencies should not be ignored, especially in light of the substantial and increasing importance of innovation in the U.S. economy.

By focusing on consumer surplus as our guiding principle, we can capture all of these key elements.

So here's topic number two, again, in the form of a question. When we think about quantifying the competitive effects of a merger, what is an appropriate organizing principle?

Well, my answer here is that we need a framework that asks whether consumers are better off with a transaction or whether they are better off without a transaction. And that means we need to think hard about counterfactuals, and we need to get evidence that describes
how the market would look with the transaction and how the
market would look without the transaction.

    Now this is already part of the Guidelines. In
considering efficiencies one question is whether
efficiencies could be achieved without the merger. And that
means we think hard about what would happen if the
transaction did not take place. And in evaluating the
possibility that the firm to be acquired may be failing,
will you do the same thing. We ask and think about whether
the firm would be viable without the transaction. But why
not extend the concept of the counterfactual to encompass
how we think about competitive effects generally instead of
thinking about competitive effects, entry, and efficiencies
as separate and distinct steps? Why don't we think about it
as an integrated whole?

    And if we formalize the analysis this way, I think
we have a better shot at performing the integrated approach
to merger review that is described in the Agencies' 2006
Commentary on the Horizontal Merger Guidelines.

    Now the need to describe the postmerger world also
affects the kinds of analysis we do. As an example, suppose
we want to estimate the effect of a merger by comparing
prices in two types of markets: Markets in which the
merging firms have stores and markets in which only one firm
is present.
If there is a price difference, is this the merger effect? Well, it might be because the price differential is an estimate of the price change that would occur if the stores to be acquired were no longer present as competitors. For the premerger markets in which only one firm's stores were present may or may not be the right counterfactual; that is, what the market would look like postmerger. Suppose the merging firms were to close the stores of firms that they acquired? Well, if that's the counterfactual, then the analysis that I just described might fit. However, if the acquired firm's stores are going to remain open, then the analysis may or may not be as relevant.

Again, it goes to: What is the right description of the postmerger world. The need to think about the right counterfactual also sheds light on why we need to do a relevant market analysis. Now I don't mean a relevant market analysis that's done for the purpose of computing shares and concentration.

But I am referring to a relevant market analysis that identifies the supply and demand portions that determine price. So let me just give you a couple examples. So suppose we want to test empirically the hypothesis that an increase in concentration is likely to lead to higher prices.

To do that we might look at a cross-section or a
panel of markets over time. This is a conventional price concentration study. But let's not take things for granted. To do this analysis properly, we do need to think about what it is we are studying.

Should we think about prices over a cross-section of metropolitan statistical areas? Should we look at how prices vary across counties? What products or prices are we actually going to look at?

Well, a price concentration analysis is an analysis of markets, which means that before we can even do the analysis we need to go through the analytical steps that are similar to what we do in market definition.

The need for a good counterfactual also comes into play when assessing the prices effects of a consummated merger. So, for example, you may have data on the price change that occurred postmerger, but what's the benchmark? Identifying the firms, the products, and prices that you would use to determine whether the merged firms raised its prices above competitive levels is part of a relevant market analysis.

So if we have, as one as our principles, the need to fully describe both the premerger world and the postmerger world, then we have a coherent and integrated way to think about not only efficiencies in failing firms, but a disciplined framework that we can use to evaluate how and in
what way a transaction will change the process of
competition to the benefit or detriment of consumers. And
the framework would also help us interpret the economic
evidence more appropriately.

Okay. Here's my third topic, again, expressed in
the form of a question. What makes for a compelling and
credible analysis of competitive effects? This is the key
to making the right decisions in the merger review process
and the key to developing a compelling argument in court.

The virtue of direct empirical evidence is based
upon data that are likely to be specific to the market,
markets at issue. So what types of analyses might we
consider doing? Well, the list is a familiar one. So I
won't spend much time going through the list.

There are bidding studies. There are natural
experiments. For example, the question here might be: Was
there a price reaction following the entry of a competitor?
There are also studies that we can do to evaluate key
propositions, like the relationship between price and
concentration.

Well, these variables tell us that we need certain
things to do these types of analyses properly. We need
relevant and reliable data, and we also need a circumstance
that make these studies possible, like numerous local
markets with different types of concentrations and shares,
previous mergers, bidding situations, new additions of
capacity, and the like.

And why are these analyses compelling? They're
compelling because for the most part these are analyses that
do not require some difficult-to-prove assumption about the
demand curve or some underlying model of competition, and
they don't depend on some untested proposition about pricing
and concentration.

The second reason is that most of these analyses
can be subject to scientific scrutiny, which means they can
be replicated and tested. But why might an empirical
analysis of this sort I just described not be compelling or
credible? Well, one problem is that not all natural
experiments are analogous to a merger.

So if we observe, for example, that prices in a
market did not rise after the exit of a competitor, should
we infer that a merger of two competitors in that same
market also would not lead to higher prices? Maybe, but
maybe not. It depends on whether the firm that left the
market is similar at all to the firm being acquired. And
that's a fact that could affect the credibility of the
analysis.

Second, the credibility of an empirical analysis
may be called into question if it is inconsistent with other
evidence. So, for example, what do you do if you have
direct evidence of effects, but customers are not complaining? Well, first, you have got to make sure you did the analysis right.

And if the analysis is done right, it's time to think about the customers who are not complaining and why they might not be complaining. What are their incentives? Are they credible? Could it be that the testimony is from large customers who are able to protect themselves, but not from small customers who cannot?

It's important to understand what factors affect the credibility of analysis on direct evidence because, if we're going to rely on direct evidence, we need to make sure that the analyses are relevant and done right. But on top of that, if there is contradictory or conflicting evidence, we're going to have to make decisions about what pieces of evidence we are going to rely on and which pieces of evidence that we might give less weight to.

So, for example, again, if we have customers who are not complaining, but we have direct evidence of effects, what are we going to do? Well, decision theory would say that we should give more weight to the pieces of evidence that are more precise or reliable. And this is likely to vary from case to case. So I'm not sure we would say one piece of evidence is always better than another.

Second, there is the practical issue of going to
court. And I'll leave it to others in this room whether or not the Agencies can go to court and win with direct evidence, but no complaining testimony of witnesses.

So here are my conclusions. I think the Merger Guidelines should reflect Agency practice for being forwardlooking. Let's first define what Agency practice ought to be and provide the Guidelines accordingly so that the Guidelines will be in sync with Agency practice.

And what are some of these desired Agency practices? Well, first, I would focus the competitive effects analysis around the concept of consumer surplus, which means that we look at output and innovation, as well as price.

Second, I would have as one of our organizing principles, the need to clearly describe a premerger and postmerger worlds.

That would include a good description of what the parties plan to do postmerger, how their incentives may change, and the likely competitor responses. If we do that, then we have a coherent and integrated way to think about competitive effects, entry, and efficiencies at the same time.

And third, as Agencies now develop compelling and credible evidence of competitive effects, it is not easy and there are no shortcuts. The overriding Guidelines that
describe that encourages a gathering and testing of all
types of direct evidence is a step in the right direction.

COMMISSIONER ROSCH: Let's hold the questions
until or the comments about each speakers' presentation
until the end.

Mark, you want to go ahead?

PROFESSOR LEMLEY: I have got somebody's watch
here.

MR. WU: I got it.

COMMISSIONER ROSCH: Okay. Well, then you are way
ahead of the game.

(Laughter.)

COMMISSIONER ROSCH: Yes. Okay. Got it.

PROFESSOR LEMLEY: All right. Good morning.

What I want to suggest today is that our market
definition is broken, not in the sense that we're not doing
it right, but that the entire enterprise is not likely to be
helpful in the modern economy.

Market definition is a binary yes/no question in
an analog world. It is something that works conceptually in
a world in which markets are static, they don't change over
time, in which products are homogeneous and in which
consumers are homogeneous. If anybody actually encounters a
market which doesn't change over time, all the consumers are
homogeneous and all the products are homogeneous, well,
then, I think you can reasonably apply the market definition test there.

Now in the real world, of course, none of those things turns out to be true in a wide variety of circumstances, and more particularly, I think, in the set of circumstances in which we're actually likely to see mergers that are of potential antitrust significance.

All right. Certainly, in the kinds of things we see in Silicon Valley, but even across a wider range of industry we have got to worry about a variety of more complex circumstances.

Now one thing you can do, one thing the current Guidelines do to try to get at this homogeneity problem is to try to make a lot of it irrelevant using the SSNIP test.

So maybe even if we have a variety of different consumers with different viewpoints, even a variety of different producers with different cost structures, if we're confident that x percentage of them will not be able to respond to a change in price, will be forced to pay the higher price, or will not enter in response to a change in price, maybe we could say, right, we are therefore comfortable that this merger has at least some problems and so we can ignore the heterogeneity in the rest.

The problem, though, is that even applying that SSNIP test in the context of a traditional market definition
is going to miss the point in a large range of cases, unless
we do a bunch of modifications to it.

First off, of course, it runs right into the

_Cellophane_ fallacy.

You can define a market, right, and if a company
is, in fact, operating as a monopolist and pricing
effectively, are market definitions going to lead us, as it
did the Court in the _Cellophane_ case, to wrongly understand
the competitive pressures that company faces?

Second, it assumes static pricing. It assumes
that prices either stay the same in a normal, nonperturbed
setting or increase slightly in accordance with inflation.
If you are in a market in which prices normally drop
significantly over time, if you sell semiconductor chips,
for example, right, the question of whether someone could,
in fact, engage in a small but significant, nontransitory
increase in price as a result of a merger is unlikely to be
helpful.

A real question might be: Would they be able to
drop the price less over time than they otherwise would in
response to technological innovation? But that's a much
harder question to ask. It ignores nonprice competition,
something Lawrence Wu's already talked about, but which
again in a large chunk of markets is, if anything, more
important than price competition.
If you gave a set of consumers the choice between a really competitively priced Sony Walkman from the 1980s or an iPod, I bet they'd take the iPod, right, even if this is not competitively priced, but because the competition that goes on in the market is not just price competition. Of course, it's innovation competition. It's nonprice competition.

Price discrimination, I think, is a further problem, right. If we are going to set our market definition on the basis of price response, the fact that companies can differentially price because they have differentiated products or because they have differentiated consumers means that the signal we are going to get from market definition and traditional structure analyses is wrong.

And then, of course, there are markets in which the payment decision and the purchasing decision are disconnected, right. So all of the pharmaceutical and the healthcare industry, in effect, is skewed in the market definition since by the facts that the people who are making the purchasing decisions are not the ones who are actually paying the bills. That makes it extraordinarily difficult to get meaningful data on market definition analysis on even seemingly simple questions like does a brand-owning pharmaceutical company compete with a generic company
manufacturing precisely the same drug but selling it at a substantially lower price?

Now none of these problems are unsolvable, right? What I want to suggest, though, is that if we are solving these problems we are doing it by essentially abandoning the market definition inquiry.

If we can accurately define a market subject to the constraints I have just talked about, we don't need to define the market, because what we have done is actually get more directly at the question of consumer demand and producer supply, get more directly at the question of market power and of likely competitive effects.

It's then kind of bizarre to say, well, we are going to take all of this rich data that we have had to collect to make sure that we get it right and then put it into a static structural analysis that gives us an HHI number, and take that HHI number and then feed it back into a model of whether or not people would, in fact, behave in a particular way, right.

You are likely to lose relevant information; you are likely to increase your number of false positives if, instead of taking the information that you have to collect to accurately assess competitive effects, and just asking the question: Are there competitive effects, you take that information, feed it into market definition and feed it
back.

So all of this leads me to believe that we ought to be paying more attention than we do to evidence of direct effects and less attention than we do to evidence of the kind of traditional structural analysis that has informed the market guidelines.

Where can we get that evidence? Well, this is a hard problem. It's an easier problem in some sense in monopolization cases than it is in merger cases, because of what Commissioner Rosch suggested, which is don't tell us about what to do about consummated mergers; those are in some sense the easy ones or tell us what to do about mergers that haven't happened yet, right.

And in mergers that haven't happened yet the problem, of course, is we don't yet have direct effects of many of the kinds of evidence that we are interested in, because we haven't actually seen the change. Nonetheless, I think you can actually gather a variety of types of evidence that may be of significance.

First off, it seems to me that companies actually, in most circumstances, have a pretty good idea who their competitors are. So one of the things you want to know is not just what does a market definition analysis tell you about whether company A or company B compete, but how does the behavior of those two companies help us to answer the
question of whether or not they compete, right.

Do they talk about each other internally as competitors? Do they engage in advertising against each other? Do they engage in intellectual property litigation against each other? Do they make their own pricing decisions with respect to each other? Do they make entry decisions with respect to each other?

Similarly, I think you can draw inferences about likely market entry from a company's behavior. The company has a sense of whether or not if they engage in a particular type of conduct it will draw entry. And companies who engage in things that sacrifice profits in order to achieve long-run change in the competitive dynamic likely are doing so because they have made an assessment, either explicit or implicit, about the likelihood of entry that is going to undermine that tactic.

And then, of course, we can look, as Lawrence suggested, in some circumstances, at natural tests, at other analogous markets, at the effect of past analogous mergers on competition.

All of this is imperfect evidence. But what I want to suggest here is that all advantages are comparative, and that the right weight is not the imperfections of direct evidence against the perfections of an idealized structural model.
The right weighting is the imperfections of direct evidence against not only the messy world of real market definition, but a world in which, if we are to get market definition right, it's going to be in part by looking at those very direct effects. If we are looking at them we may as well think about them directly.

Now we then come to what I think is the hardest problem, which is the certainty problem. There are a lot of mergers out there and there are a lot of mergers out there that probably don't deserve antitrust challenge.

An antitrust scrutiny that involves inquiring into all of these effects is a fairly robust antitrust scrutiny. It's something that I think certainly ought to play a greater role in actual merger challenges.

Once the Commission or the Justice Department has made a decision to challenge a merger, to devote substantial resources to the case, it seems to me quite logical to think that we ought to be paying more attention in the analysis of the merger itself to the direct effects and not to the structure and HHI concentration.

But what do you do about the big swath of cases in which the question is: Should I bother to even go to second request? All right. How can we devote our resources efficiently to figuring out which mergers to challenge and which ones not to?
And I guess, you know, I don't have a great answer to this question, except to suggest that we don't fully appreciate right now the extent to which we are stumbling across the same problem, even in the current Hart-Scott-Rodino environment.

If we are doing an HHI analysis in any Hart-Scott-Rodino review case, we are either doing this inquiry implicitly anyway, or we are engaging in this very stylized, static model of what it is that the market consists of that is likely to get it wrong.

So the question I think becomes the extent to which we are willing to trade off effort and some analytic uncertainty to try to get a better result, but I think that question has to be considered bearing in mind that the certainty that HHIs offer us is an illusion.

Plaintiffs and defendants in any merger case can and do come up with market definitions that give us totally different HHIs. So the argument that the antitrust bar makes that says, well, we have got to have our HHI safe harbors, because otherwise we won't know what to do, I think just misses the point.

You don't have an HHI safe harbor. What you have is an ability to argue that the market is defined in such a way that your HHI is sufficiently low that the government should not challenge the merger. But if all you've got is
the ability to argue that, that shouldn't give you any more
certainty than the ability to argue that the direct effects
of the merger are not likely to be anticompetitive.

We should certainly strive to specify as much as
possible the evidence that the Agencies will and want to use
in helping to evaluate these things, but I don't think we
should rely on a false certainty in the HHI analysis to
assume that mergers will become more problematic or more
uncertain in a world that doesn't use it.

The final point, and then I'll stop, is the
question of the extent to which some sort of structural
market definition analysis is required in antitrust law.
When we get to court at the end of the day, does the law
require us to do HHI analysis? Now, stated at that level the
answer is no.

There is no requirement in the law that mergers
have particular HHIs. There is, however, a statement in the
statute that requires that mergers tend to concentrate or
strive towards monopoly in a line of commerce, in any line
of commerce. You could interpret that, I think, in one of
several ways.

But at least one plausible way to interpret it is
that it does require that there be a business that the
merger tends to monopolize or at least restricts competition
in, maybe that requires some sort of market definition.
To me it seems that what it really requires is a market-power analysis, but that market-power analysis doesn't have to be linked to a structurally-defined market: Here are the boundaries of the market; you are either in it or you are outside it.

But if it did, if a court ultimately said, gosh, we have been doing that since Philadelphia National Bank and we have got to continue doing it that way, then it seems to me that the right workaround is not to base our entire analysis of whether to challenge a merger on the question of where that line is, but to back into it, to figure out the market-power analysis, figure out the direct effects, and those things are going to tell us, more effectively and more accurately than a pure structural analysis, what the right market definition is. Thanks.

COMMISSIONER ROSCH: Let me violate my own order here, because you've raised so many issues.

First of all, I see Karen Silverman sitting out there, and I know that she counsels clients on mergers all the time. And certitude is certainly part of that analysis, but I've got to tell you that when I was doing it I always told a client that while the HHIs were important, they were just one factor.

And by far the most important factor was what is the storyline of the transaction? Is it procompetitive, is
it anticompetitive, or is it competitively benign?

And, frankly, the reason I felt that way was for precisely the reasons that Mark has described, as well.

I considered the market definition and structure analysis that was in Section 1.0 to be -- it was kind of an artificial certitude, but I leave that to you guys to hash out.

Go ahead, then, Kathy.

MS. FOOTE: Thank you. It's great to be an academic. As a government employee, however, I have to begin with the disclaimers. Although what I say certainly comes out of my many years working in the antitrust section of the California Attorney General's Office, I am not speaking for the California Attorney General, nor am I speaking for the Antitrust Task Force at NAAG, the National Association of Attorneys General, with whom I frequently find myself doing merger examinations, either just the states together or in conjunction with Federal Trade Commission or US DOJ.

Having said that, that is really the starting point for my comments, because state AG merger review, as well as selection of mergers to review, is very much colored by first state and local agencies' experiences as purchasers and/or regulators.

Second, the policy slant and the informational
network basically arise from the AG's other, more
traditional role as a consumer protection enforcer and
consumer protection advocate.

And, finally, our historic division of labor with
our federal colleagues, when we do work on these mergers in
which our primary focus is on local markets.

Our experience is more limited than the federal
agencies. California, for example, only looks at maybe five
to eight mergers per year. I know that is hard to imagine
for the fed. But certainly out of that comes very
consistent views, views that are consistent with the
observations of others here today that reliance on market
definitions and concentration formulas so as to determine
market power, while obviously understandable, given the need
to make a decision with major economic consequences under
time pressure, very frequently misses quite important
countervailing evidence and issues that should often be
determinative. So I very much applaud the decision here to
examine the need for and use of direct evidence to get at
the truth.

Local markets, let me just postulate that local
markets, in all their quirkiness and color, are the least
likely to conform to statistical norms or models. Reliable
data probably doesn't exist at the local level. Personal
relationships and local conditions are involved. Regulatory
restraints and even politics may affect it.

A competitive-effects analysis that recognizes these things may not be easy, but it is more likely to be correct. Let me draw on some examples. And, of course, since we have Californians here, these are going to be somewhat more familiar to you than they might be in a different hearing.

First, from our personal file drawer, in 1999 the Summit Medical Center merged with the Sutter Healthcare System in Oakland, and we went to trial on that. The Elzinga-Hogarty approach to defining geographic market based on patient discharges by ZIP Codes swept hospitals in San Francisco and as far down the peninsula as, I believe under one version, even Stanford, into the East Bay hospital market, if you can believe that, and found that competition would therefore survive.

But the health insurers were all saying that their East Bay patients wouldn't accept being sent to a hospital on the other side of San Francisco Bay, that people were not going to cross the Bay Bridge to San Francisco. They were not going to cross the Hayward-San Mateo Bridge to get down the peninsula.

Unfortunately, really, it was the market-definition approach that prevailed in the end. Yet, as we have since learned, the result of that merger was a
dramatic increase in prices, even though at least one health insurer actually tried for some period, unsuccessfully, to steer its customers to the wider, so-called competitive market.

Another example in a somewhat broader market, but still local in our view -- another illustration, basically, that the assumptions that are made are by necessity incomplete, and frequently the missing information is critical, and you can't get that without a really close look at direct evidence.

There are lots of examples of this, I'm sure we can all think of them, but one of the bitterest ones for us in California -- and this is a self-criticism, although there were others involved -- had to do with oil company mergers that were assumed to be benign, because nobody really factored in the practical effects of California's unique refining formulas on out-of-state sources of supply.

The importance of that information wasn't recognized until way too late in the game. A number of mergers had been consummated before anyone really woke up to it. Interestingly, the first inklings about it, at least for our office, came when we talked to truckers.

Another example that I want to mention, and one of my colleagues who worked on a case like this is actually here today, assumptions about market entry are certainly
ripe with possibilities for missing important information. In a local market, for example, what may be missed is not just the effect of zoning restraints on new entry, but even beyond that in a place like San Francisco -- and our case had to do with movie theater multiplexes -- the realities of land use permitting process go well beyond the zoning.

The joint merger reviews that we do, and we do usually quite smoothly with our federal colleagues, take place under the federal/state protocols. Although we are doing that, the state is actually going to be applying the NAAG Horizontal Merger Guidelines.

Analytically, those are very much the same as the federal Guidelines, except for a just a few points that I think I would like to commend to your attention today. The first is greater latitude to define narrow markets based on recognizing that certain consumers are vulnerable to price discrimination.

Now certainly the federal Guidelines also recognize price discrimination. Both approaches really treat price discrimination as a market definition issue, and I think probably wrongly. The practical reality is that it should serve to illustrate competitive effects.

A couple of examples I'll just cite to that. One is there are theoretical competitive choices, let's say, as
to dialysis clinics. This is something that is a very local-market-oriented issue that we have worked on with the feds at times in the past. But whether it's dialysis clinics or supermarkets, those choices may not exist for people who rely on public transit.

Yet to try to define that as a separate market is an exercise that you could spend a lot of time on and you would end up with basically having learned not very much and not being able to do anything with the market that you have defined, if you have actually been able to define it.

Another example, rather different, there are quite varying state laws on textbook content. And even in an area where multiple competitors exist in theory, the long time it takes to develop and the fact that there are these differences, create pockets of opportunity for monopoly pricing that can very easily get missed if you were focusing on market definition.

The next area is efficiencies. The NAAG Guidelines treat efficiencies much more skeptically. Of course, this is where we, all of us enforcers, most famously encounter spin.

Truthfully, I think the merging parties themselves believe, or at least they hope, that the efficiencies' claim will prove to be true.

In our experience, certainly courts, as well,
which are particularly reluctant to make bold decisions on
matters that are fraught with uncertainty, are also very
eager to drink that particular Kool-Aid. In that area,
looking at what's happened in similar mergers in the past
can be incredibly useful.

The NAAG approach actually treats historical
trends towards concentration and the details of the history
as a criterion that may legitimately bear on legality. What
we lack very often, though, is a lot of good information
about that historical pattern.

It should at least justify closer scrutiny. That,
presumably, is at least one of the purposes of the FTC's
retrospective studies. And the use of that information I
would like to see given an explicit place in the Guidelines.

We all know a great many stories, anecdotal only,
of unintended, very expensive and certainly
efficiency-neutralizing consequences of mergers, melding two
different corporate cultures. For example, commercial banks
merging with savings and loans, teaching hospitals merging
with regular ones.

I don't want to address a sore point here at
Stanford. And the need to hire back many physicians that
were supposed to be cut, as well, of course, as the
temptations to exercise newly found market power or perhaps
it doesn't rise necessarily to the definitional dignity of
market power, but let's call it market edge. It may well overcome whatever disincentives to exercise that edge that may have been identified in the review process.

One of the best outcomes of paying greater attention to the results of analogous mergers would be the tacit encouragement of economics departments in business schools to generate more studies of them.

That would help all of us, certainly my office, who are constantly in need of additional information, economic information; build in more sophisticated understanding of the realities.

In conclusion, I'll just mention one other difference, just so as not to disappoint any of you who expect radical talk from state antitrust enforcers.

I will mention that the NAAG Guidelines go beyond the federal Guidelines in talking about wealth transfers from consumers to producers by declaring that that is actually the central purpose of Section 7 enforcement.

Since my colleague here has already been speaking about consumer surplus, I think looking at that is perhaps an alternate way of approaching wealth transfer. Maybe it's not so radical after all when you think about it. Thank you.

COMMISSIONER ROSCH: Thank you, Kathy.

Jeremy.
PROFESSOR BULOW: Thank you.

Regarding market definition, I'm reminded of a visit that Bill Gates made to Stanford during the Microsoft antitrust case. He said that Microsoft had four percent of the software market and software was a highly competitive industry with declining prices and increasing quality.

And then about ten minutes later he just couldn't quite help himself, and he described how Office and Windows were two of the five best businesses in the world, with 90 percent plus-profit margins and tremendous networking advantages.

Before getting into the Merger Guidelines, I'd like to take a step back and focus on the more general issue of how noise in the decisionmaking process can be reduced. I'm going to speak as someone who has spent time at the FTC, not the DOJ.

The single best way to reduce noise regarding the economic as opposed to the legal or political decisions would be for the Commissioners to spend more time talking to economists. I happened to take four courses at Yale Law School.

So I have had more graduate law courses than most Commissioners have had graduate economics courses.

Nevertheless, were I an FTC Commissioner I'd probably have at least two, maybe as many as three of the four advisors in
my office be lawyers, recognizing that my law knowledge is minimal relative to a professional attorney.

Similarly, I think each Commissioner should have at least one and maybe two economists among their advisors. Right now among the 20 advisors for five Commissioners, 19 are lawyers and one is a JD Ph.D. All the Commissioners, even the new appointments, are lawyers.

Even though I'm sure that the Commissioners will get great advice from Joe Farrell and Rich Feinstein, this is a recipe for noisy decisionmaking.

When I was at the FTC only one Commissioner, Commissioner Swindle, had an economist on his Staff. As a result, even though there were two other Commissioners who were much stronger academically than Commissioner Swindle, his office tended to produce the best, most thoughtful economic analysis of any of the Commissioners.

Second, I would note that in addition to the Merger Guidelines the FTC publishes two other kinds of information.

First is an estimate of how much money the Agency's actions have saved consumers. This requirement is not taken seriously. For example, except in exceptional cases, the FTC estimates savings to consumers from any action in any merger enforcement is equal to one percent of sales in the market for two years.
Were the FTC to take this requirement more seriously and provide analyses backing up its calculations for consumer benefits, I think the eventual impact would be more thoughtful and analytical decisionmaking with more understanding of the need for economic analysis.

Third, after each action the FTC puts out statements explaining the rationale behind its actions. If these statements were written in a meaningful way there might be little need for the Merger Guidelines. And, again, I think the eventual impact would be better decisionmaking.

For example, even though I was heavily involved in the Exxon Mobil case, there were certain things about the divestiture order that I did not understand. I went to read the justification afterwards and found it provided no insight. My understanding is that, while Commissioner Muris wanted to increase transparency, things are little changed in the last ten years. An approach that provided a rationale that was more similar to what a judge might write up in deciding a case would be ideal.

As to the Merger Guidelines, one way to think of the problem is as follows: In a second request, which is analogous to a detailed audit, the Agencies use a variety of information to determine whether or not an action is required to protect consumers.

The Agencies make a rough decision about which
cases to audit, based on the preliminary information they have. As with information the IRS provides about its audit selection process, the Guidelines should be informative but not too specific.

The Agencies should be able to list for firms the key factors that are considered in their analyses, such as market share, industry concentration, absolute size of firms, substitutability of merged products, and perhaps industry dummy variables, and discuss how they think about these things, and how that thinking accords or does not accord with modern economic analysis.

Significant changes in the Guidelines might be thought of as changing the underlying structure of the Agencies' screening and enforcement procedures, and therefore, changing the relative importance of different variables. Why am I biased towards a discussion of variables rather than equations, such as the HHI that purport to summarize them?

Well, I'm biased somewhat by my own work. While I have only written a few papers in industrial economics, one coined the terms, "strategic substitutes" and "strategic complements," which illustrated how hard it is to predict the strategic response of one firm to the actions of another.

A second paper, which is actually related, pointed
out the difficulties in estimating pass-through rates due to
cost changes. The implication is that there is little that
we can directly predict about competitive pricing directions
strictly from theory.

Furthermore, price effects are not necessarily
dispositive about welfare effects. For example, say that
the technology for producing a differentiated product such
as women's clothing changes so that the fixed costs of
providing a new design is reduced.

We can predict that in the competitive model there
will be more variety and higher welfare, but we cannot make
predictions about whether prices will be higher or lower
without making abstruse assumptions about things like the
life concavity or life convexity of demand.

Furthermore, while we are ultimately interested in
the effect of a merger on price, quality, and variety, it is
not only difficult to do things like to find a market, which
leads some people to want to look at data-like margins to
estimate elasticities and then price effects, but it is
difficult to estimate margins appropriately.

When we calculate the margins for refiners, for
example, do we compare the price of gasoline with the price
of crude oil and so determine that the refining industry has
become more competitive when crude oil prices have doubled
and refining margins have risen by only 50 percent?
The implication of all this is that while it is possible to discuss the factors that are likely to be important in a merger analysis, I'm skeptical of the ability to summarize competitive effects and the likelihood of consumer harm with any simple equation that tries to combine many factors.

What are the key factors that should be discussed in the Merger Guidelines?

First, the existence of efficiencies that provide the competitive rationale for a merger should be emphasized. Efficiencies are basically complementarities on either the cost side or the product development side that make the joint firm able to make more value than it could through a realistic alternative, such as a contract.

Cost savings that come about through obtaining lower prices from suppliers must be looked at skeptically because, if the suppliers are competitive, they will eventually have to be paid their costs and the lower prices will go away. And if the suppliers have market power, then the impact on consumers of consolidating purchasing power of the intermediate goods producers is ambiguous. In the case of public company mergers, comparing these efficiencies, which might reduce total cost rather than some definition of marginal costs, with a premium paid in the merger may provide information. Traditional issues of the feasibility
of entry and of the potential for consumer substitution to
other products also require consideration.

Finally, the Agencies must be concerned with
whether a merger would more closely align the interests of
the remaining competitors and so reduce the likelihood of
competitive conflict.

A deep discussion of these factors, combined with
consistent decisionmaking, rather than an emphasis on how
this information might be summarized in a particular
equation is what I would like to see.

COMMISSIONER ROSCH: Thank you very much, Jeremy.
Let me kick off the questions of our panelists.
And so that you can have a little time to think about them,
let me go ahead and kick them off, and then we'll turn to
everybody else.

Lawrence, the principal question I have got for
you is, how do you weigh factors? If we don't use economic
formula and we just list factors that we take into account,
how do you weigh them? How do you rank them? That's my
question for you.

With respect to Mark's comments, I have already
commented a little bit on them.

But I see Pam Cole sitting back there. And in the
Oracle case I always thought that one of the things that
Judge Walker was really focused on, although he didn't say
it, was that -- assume for the moment that Oracle and SAP were the last people standing in this market.

I don't think that bothered him. And the reason it didn't was because he felt that there were such substantial upfront sunk costs in the form of R&D and maybe fabs, I'm not sure, but more R&D in that case, that you lost a tremendous amount if you lost a sale.

So that even if there were a duopoly market, that you were going to have cutthroat competition between those two people standing, no matter what. That simply illustrates, I think, Mark's point that the current Merger Guidelines with their emphasis on market definition and structural analysis upfront creates kind of an artificial certitude. So, anyway, I throw that out for comment, as well.

With respect to Kathy's points, that was a very rich discussion, and I have a lot of questions that arise out of that, but I'll keep them to myself. Let me just say one thing about one thing that she said, which is that however sincerely people may really believe that their transactions are going to yield efficiencies, frequently they don't, and shouldn't we subject that to a higher screen?

Michael Porter actually has made that same observation, except his is even more trenchant. He would
suggest that very, very few mergers actually yield the efficiencies that are expected. And instead they are very inefficient, by and large.

With respect to Jeremy's observations, Jeremy, I must say the notion of having more economists rather than less on our Staffs -- and, I confess, in our office we have four attorney advisors who are very fine attorneys. They are not economists.

But why is that so? Why do I have a more of a mistrust of economists? Well, two reasons.

I think the first is that I think Joe aptly said at the table once upon a time that economists rarely win cases in court, but they sure can lose them. And I think that that is very definitely the case.

But quite apart from that, I must admit that I have gone through at least three and maybe four different kinds of economic analysis in my life, in my career, as a lawyer. The first was big was bad when I started out. The second was in the wake of GTE Sylvania, which was the Chicago School. The third was kind of a modification of that, suggested by Joe in some papers that he wrote where he suggested that there was something called experimental economics, that sellers rarely identified what was even best and profit-maximizing for them upfront, but instead, through a process of trial and error, blundered their way on through
to find out what was profit-maximizing for them. And then
most recently there is the behavioral economics school, and
I'm very concerned about the lack of an organizing principle
for that school, as well.

All of this leads me to wonder whether this search
for certitude, if you will, or predictability in terms of
backing into a market may not best be served by a very high
degree of transparency.

That is to say, what factors are really being
taken into account, not only in the second request process,
but also in court, in terms of backing into what a market
definition is. So I throw those out to each of you.

Lawrence, do you want to similarly identify
upfront any questions you have got of the panelists?

MR. WU: Sure. I think my question for Mark
Lemley and the panel in general is whether there is no room
for market definition and market concentration in helping
the Bar, and economists, and the business community
understand antitrust policy.

And, in particular, I'm thinking about what's
likely to be useful in the first, initial phase of the
waiting period. It's very hard to get evidence on
competitive effects, because not only must the parties
provide that evidence, but the FTC and DOJ staff must
evaluate and test it themselves.
I'm skeptical that all of this can be done in the initial waiting period. So if that is the case, would you still say that there is no room for market shares and concentration in the process?

COMMISSIONER ROSCH: Okay. That's a question.

And, Mark, please address that when we get to you.

Kathy, what are your questions?

MS. FOOTE: My questions really relate to the weighting of the evidence. And this is as much a question to myself as it is to members of the panel. Firmly believing, as I do, that this evidence is really important, at what point does it become determinative?

COMMISSIONER ROSCH: Okay.

And, Jeremy?

PROFESSOR BULOW: Well, let me ask you a question, Tom.

COMMISSIONER ROSCH: Okay. I deserve it, by the way.

PROFESSOR BULOW: Yes. So, you know, what economic analysis or research that has been done in the last 20 to 25 years does you and your office take into account in coming to its decisions on antitrust cases?

COMMISSIONER ROSCH: Well, that is a perfectly legitimate question. And I guess the answer is that we tend to look at these through the lens of trial lawyers, because
we think that that is, generally speaking, how the staff is
going to analyze the transaction increasingly at the FTC,
because we are increasingly willing to litigate cases that
we think should be litigated.

And so they have to make an evaluation as to
whether or not those cases can be won. And those are the
factors that they take into account. As to specific
factors, I am concerned that any -- first of all, I am not a
fan of lists. I should say that upfront.

But that said, the Bar does need precise
identification. It deserves precise identification of as
many of the factors as we can possibly provide. And some of
those are going to be discussed today: Power buying, price
discrimination.

I think it makes a huge difference whether or not
there is an intermediary or a reseller involved in the chain
of distribution, because sometimes the reason that you don't
get a lot of complaints is because they can pass any price
increase along to the end user. So that is another one.

Kathy's observation that price discrimination is
arguably more relevant to a competitive-effects analysis
than it is to a structural analysis is probably apt. We do
take a look at that.

We certainly take a look at the increase on price.
We take a look at the increase on whether or not the
transaction is likely to increase innovation. And we do
take a look at history, very, very largely. Perhaps that is
-- in Jeremy's lingo and Lawrence's lingo that is called a
natural experiment, but we do take a look at history in
order to make that determination.

Now those are some of the factors, but I'm
concerned about the list being so short that it's used
against the staff in litigation by people who are very
skilled in that respect and also by judges who don't
understand these considerations as well as perhaps they
should. Okay.

Lawrence?

PROFESSOR BULOW: No specific stuff that has been
done in the last 20 or 25 years that you can think of?

COMMISSIONER ROSCH: You know, one of the things
that we did take a look at, Jeremy, -- and actually, your
point about -- I was glad you didn't mention retrospectives,
by the way, because I think they are very expensive to
conduct, particularly for the recipient of the
retrospective.

But the idea of issuing a closing statement, a
statement that explains why you didn't challenge a merger,
is a very good one. And I don't know that we have paid that
much attention to it. By far, I think the best one we have
done was in connection with this latest Merck -- I'm sorry
-- not Merck, but Kaiser transaction where we identified a whole series of factors that we took into account, including some that went to innovation.

And the staff really ran down those considerations very, very completely. And the statement which the Commission issued discussed those at some length. And probably that does a better job than I can do on the fly here.

Go ahead, Lawrence.

MR. WU: Okay. I'll start by talking about the various types of evidence we can use to evaluate competitive effects. And there are many types of analysis we can do, from natural experiments to bidding studies, and the like. So here's how I think about weighing the various pieces of evidence. And there are a couple of different perspectives we can take on this.

So here's one perspective. Okay. Let's take the division between data versus qualitative evidence. Business plans, interviews, and speeches, those are all important qualitative pieces of evidence, but they are more difficult to test and the credibility of a witness could be subject to some criticism on the stand.

My preference would be to focus on empirical data, empirical analyses. All the business documents may help us in creating the propositions we want to test, but then I
would use an empirical analysis to test those propositions. So if I had a choice between qualitative data and quantitative data, I think the qualitative data allows for more testing of propositions.

Let me think about weighing it from a different perspective, and that is weighing on the kind of questions that are at issue. Given the relevance and given the data that are available there are different kinds of analyses we can do. The analyses may address different types of questions.

Some questions may be more important or dispositive than others. In one case, it may be entry. In another case, it may be efficiencies. In other cases it may be substitution among different competing products. The importance of a question to me will affect what weight I give to a particular piece of evidence.

Another perspective has to do with the precision of the results. With empirical analysis, the precision we can evaluate statistically. And, as decision theory would suggest, we ought to give more weight to results that can be tested, replicated, subject to scientific scrutiny, and results that are more precise. So, you know, those would be factors, you know, I would consider.

So, again, this overall -- the theme here is I think there is no one weighting, but the weights are going
to depend on the question at issue and how important that issue is. And it goes to the reliability and confidence we have in a particular result.

And that lastly I would say on the weighting is that there is something called retrospective analyses. We can go back and evaluate how important certain pieces of evidence are, in general, if we wanted to. We could also go back and think about it in a particular case.

And I think that kind of ex-post study is important and I think the Agencies ought to consider doing that. The Agencies already do that in many ways, and I think that is something that we could continue.

And I'll even say something as it relates to the HHI and possibly the concentration threshold. The Agencies have data on transactions over the past decade. Analysis of that can be useful in evaluating what a safe harbor threshold might be.

And even then, ex-post, even if some transactions are cleared, there is an opportunity later to evaluate whether that was the right decision. And I think if you think about it in that dynamic way that you might set some thresholds and later evaluate and revise accordingly. I think that is a sensible, empirical way of thinking about policies.

Mark.
PROFESSOR LEMLEY: All right. So I think one of the significant things to understand about a focus on direct effects rather than on market share and concentration thresholds is that it can, in appropriate cases, push towards either more or less antitrust scrutiny than we currently have.

So is it possible that hard-fought duopoly can prevent any substantial competitive harm? Yes. Did that happen in Oracle PeopleSoft? There, I'm a bit more skeptical.

The part of the problem is actually that our economic theories around the behavior of duopolists are surprisingly diverse. We have a variety of different predictions as to how duopolists will behave. And it's not clear, actually, how those are borne out empirically.

I think you would, certainly, in a duopoly situation, even if we thought these companies were really competing strongly, we would tend to worry about concerted effects as to new customers, and so forth. You would want to sort of look very carefully at the benefits to the merger.

Now Lawrence asked me is there no room for market definition here. I think the right answer is, look, there is always room to talk about the competitors that you face in the marketplace, because those competitors are going to
be relevant to whether or not there is going to be harm from a merger.

But the right way to talk about it is not, look, I have x number of competitors in the marketplace and because I got over the magic number let's stop having the conversation. I think the right way to think about it is to say if I can point to the presence of a bunch of competitors that we agree are, in fact, competing with me or are constraining my behavior, that fact is going to make direct anticompetitive effects from a merger unlikely.

Now, I did want to actually sort of throw out a question for the panel, as well. This is sort of two, to me, quite related questions. One of the things I noted in listening to the panel is a split between -- I don't know if it's the Stanford/non-Stanford people or what -- between Jeremy and I on the one hand, who I take it to view the goal here as a social surplus, as incorporating efficiencies on the producers' side as well as consumer surplus, and Kathy and Lawrence on the other hand, who I heard as saying the proper, exclusive focus is consumer surplus alone.

I guess I'm sort of curious for Kathy and Lawrence, why you would not incorporate a producer surplus. And, in particular, this relates to an issue that Kathy raised, which is the role of price discrimination.
discrimination is going to differ quite dramatically, depending on whether we think that the proper unit of analysis is social surplus, in which case much of the effect of price discrimination, though perhaps not all, is a wealth transfer, or if we think it's purely consumer surplus in which case the fact that it is a wealth transfer is going to line up pretty heavily on the anticompetitive ledger.

COMMISSIONER ROSCH: Kathy.

MS. FOOTE: Several comments.

First, the interviews that generally launch a merger investigation are just a treasure trove of information. My office obviously participates with FTC and DOJ on many of those.

So the question really is, where does it go, and what is done with it, and can more be done with it.

Certainly the interviews inform the second request. But after that a lot of it sort of vanishes. It goes into the ozone. It may certainly factor into the internal analysis, but the learning from it ultimately may be lost.

Possibly that is because the decision, which in most cases involves either a decision not to go forward or a settlement, is to some extent opaque, and so a lot of that texture is lost. But if there are ways to carry that learning forward, and the closing statement idea may
actually be a good way of doing that.

Secondly, with regard to weight of the sort of competitive effects factors, I think that really has to focus on the notion of what is going to influence a judge. The judge is sitting there, with the rare exception of someone like Vaughn Walker -- the judge is sitting there not really knowing a lot about the situation, under a great deal of pressure to decide something very important and very uncertain.

And what will enable that judge to really break out of a kind of a wooden reliance on balancing of expert testimony and actually evaluate evidence as that same judge would do with a great deal of comfort in a nonmerger case.

With regard to that one thing that may be useful is essentially to kind of expand the roster of experts so that it is not just one expert economist against the other.

Now frequently the economist is the surrogate for a lot of other expertises, for the businessperson's expertise, what other hospital administrators actually believe to be the case, or what the traffic engineer really has to say about crossing bridges, if we want to take our Sutter example.

And all of that is somehow or other wrapped into the economist's testimony. It might be -- it is certainly more arduous and it will take more time at trial, but to
actually bring those experts and hear what they have to say in court where it is, where the investigation up until that point really, really does point to its being a critical piece of information without which the other analysis is really going to go sideways.

Finally, I just mentioned to Mark, social surplus I think is where certainly our approach tends to be. And that is, I think, the cause of our -- the fact that the state AGs do come at this from a kind of a consumer protection end of things, which covers a lot of bases other than just price.

COMMISSIONER ROSCH: Jeremy.

PROFESSOR BULOW: Yes. Well, first, you know, I want to comment on Tom's remark that economists can lose cases.

COMMISSIONER ROSCH: Oh, I was being catty.

PROFESSOR BULOW: Very few FTC cases have the remotest chance of going to litigation. And when they do and it's a big one, they hire outside counsel. I mean, the vast majority of the lawyers in the "Bureau of Competition" are never going to be in a case. And I think that is a poor justification for the four-to-one ratio of lawyers to economists on the competition side.

I'm kind of reminded of the story that my undergraduate advisor, James Tobin, told when he won the
Nobel Prize in Economics for his work on portfolio theory, and he was asked to explain it to a newspaper. He tried to explain it, and the guy said to make it simpler. And he tried to explain it again, and the guy said: Can you make it simpler? And, finally, he said, "Well, don't put all your eggs in one basket." So the next day the story comes out in the newspaper, Economist Wins Nobel Prize for Theory, don't put all your eggs in one basket. Well, at some level, at that point, the newspaper guy thought he understood what Tobin had done. But, of course, he didn't because he didn't have the training and he couldn't really understand it at a very subtle level. He could understand it at a sort of supersimplistic level. And if he thought that was all there was to it then, he's going to think, well, what is there to economics? I think there is a certain amount of that going on. And you know maybe the best way to describe it is, I have heard antitrust lawyers refer to Robert Bork and the Chicago School as the "new economics," and that is 1970 to 1975. It's sort of way out of date.

I think not realizing that science marches on, but there is a lot to learn. There are a lot of things that people know outside of your field that are really important. The analogy would be, let's say, you took your view of the legal profession from watching "The Paper Chase," and you said -- you saw the students go up and get Kingsfield's
notes and say: Well, now that I have got Kingsfield's notes from 30 years ago, I'm able to ace the class, because you know what's going to happen in the last 30 years.

I mean it's not that way, I'm sure. I'm sure that part of the reason, Tom, that you have four attorney advisors is because you realize that there are a lot of complicated questions in the law. And even if you were trying to explain to somebody like me, who doesn't know that much about it, you would have to give me the "Don't put all your eggs in one basket" version so that I could sort of understand that there is a lot else going on.

And so the fact that you know that you can make use of four lawyers in a field where you know something about, you should realize that there are other fields out there like economics, which people think are relevant to antitrust, I mean some people think it's relevant to antitrust, and just kind of keep in mind that you should try to know that there may be things you don't know.

The last thing is in terms of retrospective commentary, I actually think it would be great if the FTC and the Justice Department put significant resources into explaining in a serious way what they did in each case, and why and how much, to the extent, when they do an intervention, how much they think that intervention is saving.
Yes, it would cost a lot of money. Yes, it would require hiring more economists if you really wanted to do it seriously, I think. However, I think it would also help provide a lot more clarity to people going forward.

You look at a lot of the cases that I saw in my two and a half years, and I think it would have been very difficult for somebody to look at the decision and say, 'You know, gee, how can I figure out what's going to happen next,' even though you had Commissioners who were smart people working very hard trying to do the right thing.

So I think that having serious retrospectives, while they might be costly, they might provide a lot of help in future cases and they might actually reduce a conflict and make it easier for antitrust lawyers advising their clients with the help of economists to figure out what might work for them and what might not.

COMMISSIONER ROSCH: Well, thank you, Jeremy. I think we all need to be reminded and me, particularly, that a good dose of humility is warranted here.

Carl, indulge me just to take a few questions from the audience, because you guys started 15 minutes late, and as a result we started 15 minutes late. So let me just take three questions from the audience, okay? Yes.

PROFESSOR SHAPIRO: Yes.

PROFESSOR VARIAN: So prior to the review of
definition of market, there might need to be a definition of
merger review overall; generally what sorts of cases prior
analysis shows are problematic. I'm thinking of situations
where everybody selects a ballot. Their cases were the one
firm in history is a natural, most expeditious supplier to
the other firms who use it, and it happens all over to the
place.

And I would argue that those business deals were
easily undone. There is no scrambling the eggs. Those
cases are much better, looking at another perspective, point
of view. That is, you notify the people: Well, there may
be competitive issues here, but this easily could undo or
reverse deal, go ahead and do it, but it could take a year
or two.

COMMISSIONER ROSCH: Okay. All right.

PROFESSOR SHAPIRO: So can I -- are we responding
to these, or do you just want to --

THE REPORTER: I am not getting the question on
the record.

COMMISSIONER ROSCH: Okay. Well, the question was
-- actually, it wasn't really a question so much as it was a
comment. There are some deals which, on their face, may
look like they are anticompetitive in effect, but they
aren't. And we ought to be able to identify those upfront
without a very lengthy inquiry into structural issues.
PROFESSOR SHAPIRO: I'll make sure I bring this to the questioner. Okay.

COMMISSIONER ROSCH: Okay. Sure.

PROFESSOR LEMLEY: Yes. So I understood Hal, I thought, to be going in a somewhat different direction, right, which is that maybe what we can do is have a kind of trial merger period in which we let you merge, but if it turns out that this was a problem we break it up later.

I can imagine circumstances in which that would actually work, but I could also imagine circumstances in which it would be a disaster, right.

And so one of the things that you would want to pay attention to, I think, is whether there is a real plausible claim of efficiencies in integration, as opposed to efficiencies in supply, and so forth, because if the point of a merger is efficiencies in integration, then one of two things is going to happen.

One is you are going to have something that is really hard to unravel if it turns out after the fact that you wish you hadn't allowed it, or you are going to have a company that, during this trial period, doesn't actually get any of those efficiency benefits because they are unwilling to really integrate their units until they are sure that they are not going to be unraveled, in which case you have skewed the measure of whether or not it's, in fact, not good
for competition.

I mean, I have been kind of playing with the idea of: Is there a way to sort of either allow a merger on probation, or the alternative I guess would be to look at the possibility of remedies short of unraveling the merger in the circumstance in which you later decided it was anticompetitive, right.

There may be circumstances in which we said we are dubious about this merger. We are going to allow it to go through, but we reserve the right to years from now to come back and impose certain conditions on the merged company to try to restore competition if, in fact, it turns out to be necessary.

COMMISSIONER ROSCH: Go ahead.

Why don't you introduce yourself before you ask a question?

MS. COLE: Hi, everybody. I'm Pam Cole. I work for the Antitrust Division in San Francisco. This is actually a common question I think I'm going to have throughout the day, and that question is whether or not the Merger Guidelines do a good job of helping staffers, such as myself, assess the likelihood of some type of postmerger-coordinated activity by the merged firm.

I see that there is a panel on unilateral effects and there is a panel on price discrimination, but I think we
also have to think about coordinated activity in the
postmerger world.

Commissioner Rosch commented on the fact that
Judge Walker didn't seem bothered by the fact that even if
Oracle and SAP were the two companies left standing there
would have been no anticompetitive effect. I think that may
have partially been because the Justice Department really
based its case on unilateral effects and localized
competition between Oracle and PeopleSoft.

So often perhaps some type of postmerger
coordinated activity between Oracle and SAP in terms of
focusing on certain industry verticals, or whatever. So I
just want to throw: Any thoughts that you have in terms of
whether or not you think the Guidelines do a good job in
terms of helping the staff, such as myself, analyze possible
postmerger-coordinated activity in the market.

COMMISSIONER ROSCH: I think they do a -- I told
Carl this -- I think they do a terrible job.

First of all, because, as Professor Whinston
observed in the last panel of this kind, it's very strongly
arguable that the same kind of analysis that we engage in
with respect to unilateral effects and coordinated effects,
it's the same.

He makes a strong argument that that is the case.
And I'd like Carl and Joe to give that some thought as
economists, frankly, because it may be the case. I'm not
enough of an economist, as Jeremy has pointed out, to
really, really --

(Laughter.)

COMMISSIONER ROSCH: -- analyze that through.

But, in any event, that is his observation, and he is a very
distinguished economist.

PROFESSOR BULOW: There may be legal issues in
some of these decisions that have nothing to do with
economics.

COMMISSIONER ROSCH: The second --

PROFESSOR BULOW: It causes them to do what they
do, I suppose.

COMMISSIONER ROSCH: Right.

The second point is this, Pam. And this is the
point I made to Carl. In most unilateral effects cases you
also have a coordinated effects story. And I can't, for the
life of me, figure out why the staffs have drawn this
dichotomy between coordinated effects and unilateral effects
because, in most cases, there are problems with respect to
coordinated effects, as well as problems with respect to
unilateral effects.

With respect to Oracle, the Division did a
miserable job in that case of developing a coordinated
effects story, at least from my standpoint. It wasn't until
the 11th hour that they argued, and it was way too late in the game at that point, that there is more than one possible coordinated effects.

We focus on coordinated pricing effects. And the economists are always telling us that that particular problem is eliminated if pricing is opaque, because it's bid pricing.

But the problem of customer allocation, of market division is not eliminated by opaque pricing. And that is a real possibility in a lot of so-called unilateral effects cases.

MR. FARRELL: Joe Farrell.

The main thing I would say is, don't go away. Hang on for this afternoon's session entitled, "Unilateral Effects," because one of the issues that I do want to pose there is precisely: To what extent does the analysis shade over and to what extent are the two theories of concern not as strictly separated as one might think by reading the '92 Guidelines. So we'll get into all that this afternoon.

COMMISSIONER ROSCH: Okay. Thank you.

PROFESSOR SHAPIRO: We do allow these advertisements during the middle of a session in special cases.

COMMISSIONER ROSCH: Final, final comment.

MR. McCAULEY: Good morning. My name is Ryan
McCaulley. I'm curious. So going back to decision theory and design in the certainty that we provide to corporations or not that are looking at merging. Is there something that is an alternative to HHI?

So I think that there is been some discussion of price pressure index, PPI, is that the proper acronym, a more upward price pressure index. Does that serve as some substitute that would be acceptable, as opposed to HHI and the traditional market definition measures that we go through?

COMMISSIONER ROSCH: You can very briefly comment on that.

MR. WU: The upward pricing pressure is useful because it focuses us on things that I think really are useful, looking at elasticities of demand, looking at substitutes, looking at close margins. And that is all very useful. And so I think that that is why that approach is useful. It takes us away from market shares and market concentration.

COMMISSIONER ROSCH: Mark.

PROFESSOR LEMLEY: Well, so I think the answer is yes, but. So I agree with Lawrence, it's useful. But then I think there are going to be circumstances in which it's not going to be the right solution. What happens when we have declining price markets?
Do we have to worry about a Cellophane problem, --
it is not to say, don't pay attention to it, but it would
make me reluctant to identify this as a kind of rule-based
screen. You know, if a PPI is over a certain number then
challenge. If not, no challenge, without further analysis.

MS. FOOTE: I'm just a lawyer.

COMMISSIONER ROSCH: Okay. So I guess Jeremy.

PROFESSOR BULOW: So I think we are talking about
the index that Joe and Carl wrote about, for example, in
2008. It's a tool that would be useful in some cases, but
not necessarily every case, just like, the Herfindahl Index.

When you are trying to model a particular industry
or analyze a particular industry, sometimes one kind of
model is appropriate or relatively easy to use. Sometimes,
it's not. Even in Joe and Carl's model, there are certain
variables such as the profit margin that the firm is making
that you have to be able to estimate well to be able to use
the model. And sometimes there is going to be some
ambiguity to that. So it is the kind of thing that I think
that probably in a lot of investigations is going to turn
out to be useful, but I'd agree with Mark that you wouldn't
want to use any one thing like that and say that is an
absolute screen. I don't think there is anything that you
would want to use as an absolute screen, because the idea of
the tool I think is that it helps in a lot of cases, but not
necessarily that it's helpful all the time.

COMMISSIONER ROSCH: Okay. Carl.

PROFESSOR SHAPIRO: Okay. Thank you, Tom, and the panelists. We'll take a 15-minute break. So around 11:15 we'll resume. There are restrooms downstairs, critical information, and coffee and other things over here.

(Recess taken from 11:03 a.m. to 11:21 a.m.)
PANEL 2: PRICE DISCRIMINATION AND LARGE BUYERS

MODERATOR: CARL SHAPIRO

PANELISTS: HAL R. VARIAN, Chief Economist, Google, Inc.
CRAIG WALDMAN, Partner, Jones Day
KAREN E. SILVERMAN, Partner, Latham and Watkins, LLP
J. DOUGLAS ZONA, Vice President, Charles River Associates

PROFESSOR SHAPIRO: Okay. Let us resume. So have a seat.

This panel is on "Price Discrimination and Large Buyers." I really want to thank all the panelists. Let me just go down and identify them without going into details.

But Craig Waldman on my immediate left, partner at Jones Day; Hal Varian, Chief Economist at Google and, well, I have to add that Hal, he is also still a professor at Berkeley, although on leave; Doug Zona, Vice President at Charles River Associates; and Karen Silverman, who's a partner at Latham and Watkins.

So thank you all on the panel for coming here. I'm very pleased that both Agencies can get the benefits of the experience and knowledge of the panelists here, which spans considerable academic experience and great practical experience as well.
So let me set things up. First, there really are somewhat distinct. Price discrimination and large buyers are slightly different topics. They're related. Price discrimination is addressed in the Guidelines, and I'll talk about that in a moment. And we have already heard a bit about it in the preceding panel.

Large buyers, as such, is not directly addressed in our Guidelines. We've taken note that the European Commission's Merger Guidelines that were put forth in 2004 have a section on large buyers. And the one natural place to look is to look at that and see whether we could benefit from something like that, or at least address the same issues.

So we are going to take those in turn in our discussion after each of the panelists -- we'll follow the same format -- gives their introductory comment.

Let me say a few words about price discrimination, both somewhat how I perceived this before I took my current job, and then what I have seen in the ten months since I have been at DOJ.

In a lot of markets, there is some price discrimination by the sellers. And that is, I would say, particularly true in a lot of the high-tech markets or the innovative markets that, we are naturally thinking about being out here at Stanford. Different, to some extent,
based on product differentiation, different products for different customer groups. In other cases more traditional, classic price discrimination, different prices for different sets of users.

The Merger Guidelines -- and a lot of our analysis when we look at competitive effects, which is most of what we do in a merger analysis, we are looking at possibly, let's say, differential effects of the merger on different groups of customers even within a broad market or a market that you might define nonuniform competitive effects. And it's closely related to price discrimination.

Now the Guidelines, as they are written, I mean, the current Guidelines, say very little about price discrimination. I happen to think what they say is perfectly correct, with maybe a few tweaks, but it's rather terse. And I think one of the issues is can we elaborate on it, explain how these things are done, you know, just -- it's rather terse and maybe even opaque.

There are essentially two or three paragraphs in the whole Guidelines that address price discrimination, which is put forward as there is the main analysis, which is when there is no price discrimination. And then there are these paragraphs that say a different analysis applies where price discrimination would be profitable for a hypothetical monopolist.
Both of these paragraphs occur in the market definition section. So one of the issues, some could say failings of the Guidelines, is that they don't really talk about price discrimination much, if at all, in terms of the analysis of competitive effects.

It's framed in terms of the market definition step, and we already learned from Professor Lemley that market definition is not the be-all and end-all of merger analysis. So this discussion is framed in terms of, well, let's say, existing buyers sometimes will differ significantly in their likelihood of switching to other products in response to a small but significant and nontransitory price increase.

If the hypothetical monopolist -- there we are in that context -- can identify and price differently to those buyers, targeted buyers, it would not defeat the targeted price increase, dah-dah-dah-dah, then the hypothetical monopolist could profitably impose a discriminatory price increase and the Agencies will consider markets defined consisting of a particular use or uses by groups of buyers of the product for which the hypothetical monopolist would profitably impose this SSNIP, and separately impose at least a SSNIP.

So that is the framework, but then there is essentially really nothing much, virtually nothing else said
about how you would do this, when is it applicable, what
does it imply for competitive effects, other than you would
have defined those markets separately.

So that to me is a frame of where we are looking
for information from the more of an academic setting,
economic setting, practitioner setting. Now how is that
taken onboard and practiced in markets where there could be
-- you know the Agencies might say or maybe the merging
parties would agree or not that if there is price
discrimination, where does the analyses go with that.

Let me mention one case just to make it a little
more concrete, bring it alive a little more, that is
described in the Commentary from 2006, just so that this
isn't entirely, you know, conceptual, I guess, at least my
setup here. And this is one example. And, as economists
know and everybody knows, there are myriad methods of price
discrimination, some of which were catalogued by Pigou in
the 1920s. And so any one example is just that. It's one
example of price discrimination.

And the case I'm referring to is the Quest Unilab
merger that the FTC reviewed and I believe challenged in
2003. So these were two companies in -- appropriately
enough it involved Northern California here -- clinical lab
testing services. And so this a lab. You know, when you go
to the lab and you get your blood tests and other tests.
So according to the Commentary -- and I don't know about the case from personal experience -- these testing services are sold to physician groups, as well as health insurers and hospitals, at least three types of customers. There may be more.

And the concern, at least as described in the Commentary, was the market for clinical lab testing services as sold to physician groups. Okay. So that would be a price discrimination market. That group was viewed as vulnerable or more vulnerable than the other groups.

And if you have that situation, what do you need in order for that to hold up. What would you do in terms of measuring market shares? How would you evaluate competitive effects for that group, when they may not be applying to the hospitals and its competitive effects for the physician groups when they may not be alleged or as significant for health insurers or hospitals?

So there are many other examples. Geographic price discrimination is another important one. So that is the type of thing where Guidelines are spare and we want to learn more about how this works out in practice and how they could be improved. Okay.

So I'd like to turn first to Hal Varian in no small part because Hal is one of the people who's done fundamental academic work on price discrimination. And he
happens to be the Chief Economist at Google, so maybe he knows a little about the pricing, as well, in practice.

Hal.

PROFESSOR VARIAN: So thank you very much for that introduction. I want to make some general comments about price discrimination.

As Carl mentioned, the Merger Guidelines only refer to this in two places: In Section 1, Overview, and Section 1.12. They point out that there could be several relevant markets if there are several distinct buying groups.

And the simplest case is, of course, geographic markets where there could be a more or less competitive environment and different geographies. Kathleen, the textbook example is a very nice example of that.

You would also imagine in a number of other ways that you could look at market segments, such as business users, personal users, high-volume users, low-volume users, luxury goods, ordinary consumers.

Kind of a nice case in point is airline mergers where you could have business travelers and tourist travelers that are affected differently. And, in fact, they have very different needs based on very different prices depending on the competitive circumstances.

So as Carl mentioned, this discussion that is
currently there is very brief. And I think it makes sense
to enlarge it by considering a few more examples of this
sort, mainly to discuss the prevalence of price
discrimination, why it is important now and I think a more
important issue in the future.

I'll start my general observations by saying I
think we should have two cheers for price discrimination.
It's good to point out that price discrimination is in
itself not a bad thing. In fact, in many cases differential
pricing allows for consumers to be served who otherwise
wouldn't be served.

As Mark Lemley alluded to a few minutes ago and I
think most if not all economists recognize this point, but
almost no one else does so it's probably a good idea to
spell it out in a sentence or two.

Now I mentioned that price discrimination was very
prevalent. And for some markets I think it may be really
the only viable form of pricing. So a noteworthy example
might be markets for information goods like books,
magazines, newspaper, software, data, et cetera, where there
is a very high fixed cost, a very low marginal cost, low
cost of entry, particularly today. And so product
differentiation is absolutely critical.

Some sort of product versioning is going to be, I
think, an inevitable outcome in most of these markets. And
so there will be associated differential pricing along with this.

The other case that I think is particularly noteworthy is B-to-B markets where prices are very commonly negotiated by sales teams. And so price discrimination is really the norm for many B-to-B transactions.

So I think that raises two issues. One is the market definition problem should be thought of in terms of a bargaining problem. That means you want to have serious consideration of what outside options look like for the bargaining participants. Furthermore, since the bargaining and negotiations are often multidimensional, it's important to look at factors other than price alone.

This is what Commissioner Rosch mentioned this morning. For example, in some negotiations one party might receive a low price in exchange for previous behavior as with a loyalty program, or in anticipation of future behavior as with penetration pricing, or due to some other transaction that is taking place with the same parties as with bundling. And all of these, of course, are forms of price discrimination.

Now they are not necessarily harmful to consumer welfare or, in this case, business welfare in and of themselves. What's necessary is to look at the impact of those practices on competition. So loyalty prices could be
used in some circumstances to discourage entry.

Penetration pricing could potentially, in some circumstances, be confused with predatory pricing. And then the line between bundling and tying is sometimes difficult to discern. So they aren't necessarily bad, but potentially in some cases it could be used in ways that have an adverse impact on competition.

As we all know, these issues about differential pricing in B-to-B markets arose in the Microsoft case, the Oracle-PeopleSoft case, many other cases. And I think it would be very helpful in the Merger Guidelines to mention some of the considerations I just alluded to.

Now the case that Carl mentioned earlier about big buyers is a particularly interesting form of price discrimination. And so the argument there is that two merging firms may argue that their combined market share is not worrisome, since the ability of the merged firm to set prices will be disciplined or limited by the presence of large buyers who have maybe a lot of bargaining power.

I think to examine this kind of argument you have to look specifically at the situation of the buyers to identify that source of claimed bargaining power. Even large buyers could have few alternative suppliers in some situations, so a big buyer doesn't necessarily mean big bargaining power. Everything depends on what the outside
options look like in that particular bargaining and negotiation problem.

Secondly, even if the big buyers have sufficient bargaining power that allows them to continue to pay low prices after the merger takes place, small buyers or any buyer without good alternatives may well wind up facing higher prices, and the impact of those higher prices on the small buyers could be a relevant consideration.

Just to take a very extreme case to illustrate what I'm thinking about, imagine a situation where you have something like an office supply market where there are relatively undifferentiated products. A large firm might set up a procurement auction to have people to compete in supplying you with pens, and pencils, and yellow pads, and paperclips, and all these things.

And, in fact, there are now many web services who will actually run these procurement auctions for you. And they actually tend to end up with much reduced prices when you sell things by an auction as opposed to just individual bargains. So the prices may well end up being close to marginal cost.

However, if the two firms merged that were previously competing in these procurement auctions so there is only a single supplier now then, of course, the competitive forces would disappear. You'd likely see a
higher negotiated price coupled with significant price
discrimination. So clearly the relevant issue is whether a
buyer, big or small, has alternative sources of supply after
the merger.

So to summarize this case about big buyers, for
the big buyers' argument to really exert substantial price
discipline it would seem you would have to satisfy the
following three conditions:

One, price discrimination is not feasible for some
reason. Exactly why that is should be investigated.

Two, the big buyers are large enough so they are a
significant consideration to pricing decision when it sets
this assumed single price.

And, finally, the big buyers have a credible
alternative source of supply. And I think those sorts of
issues should be spelled out in a document. Thank you.

PROFESSOR SHAPIRO: Okay. So actually, though,
let me just ask Hal. So in this last, the big buyer
discussion --

PROFESSOR VARIAN: Right.

PROFESSOR SHAPIRO: -- you just did, so you said
the big buyers -- if I can paraphrase; tell me if I got it
wrong -- the big buyers might protect the whole market if
the suppliers who are merging cannot price discriminate.

PROFESSOR VARIAN: Yes. Yes.
PROFESSOR SHAPIRO: Okay. So if we observe before the merger that the big buyers are getting better deals from the merging firms -- that has been the history. We often see that, and we often hear that. And that can be put forward as an argument, the merged companies say: Look, these big buyers, they've got a lot of power. We are forced to give them a really good deal.

So then that would presumably take us out of your --

PROFESSOR VARIAN: Yes, exactly.

PROFESSOR SHAPIRO: -- place because that would demonstrate price discrimination is feasible.

PROFESSOR VARIAN: Right. If they are, in fact, engaging in price discrimination prior to the merger, then there is no reason why they couldn't price-discriminate after the merger. And if they are price-discriminating after the merger, then the big-buyer argument loses a lot of credibility.

So maybe I stated it in terms of a negative. I said: For the big buyer argument to exert substantial price discipline you would have to have these three conditions satisfied. If they weren't satisfied, you would expect that it wouldn't really exert price discipline.

PROFESSOR SHAPIRO: Yes. I think you stated it very clearly. I just wanted to doublecheck --
PROFESSOR VARIAN: Yes.

PROFESSOR SHAPIRO: -- what it would imply in the case where we observed premerger price discrimination.

Okay.

Doug.

MR. ZONA: Hi. I'm Doug Zona, and I'm an economist. I know that it's maligned sometimes. And I had thought sometimes, that being an economist requires an apology. I hadn't thought it would require one here, but apparently it does.

So about, well, maybe five years ago I was meeting with a CEO of the California Power Exchange. And we were talking about the bad things that were happening there at that point in time. And I walk into a conference room and there is the CEO. He's sitting with his feet up on the table. He's the only guy in there. I walk in and he goes, "Who are you?" And I said, "Well, I'm an antitrust economist." And he kind of leans back a minute and he says, "Well, that doesn't help me. I don't trust any of you people."

So, I would second a motion to change it from "antitrust" to "trust." And maybe we should do the same thing with price discrimination. It shouldn't be called discrimination. It should be called "price opportunism," or something that sounds a little bit better, because like
antitrust, it doesn't really mean that.

So price discrimination, here we are, my firm did an analysis of the comments that were submitted for the 20 questions or so that were asked by the Agencies. And 20 questions, looking at the responses, there were about 40 written submissions to those questions.

The top three questions dealt with direct competitive effects, the HHIs, and efficiencies. All of those got at least 10, in one case 16 comments, about that particular topic. Going down the list of all 20 questions, price discrimination, it was 16, way at the bottom. And I don't know why that is.

Price discrimination is very exciting for an economist, and yet there were only six responses to that particular question. I don't know why.

Large buyers, price discrimination, localized competition, these are right at the nexus of the tension between the market definition question and the competitive effects question.

I think it makes good sense that the price discrimination discussions that appear in the Guidelines are where they are, because in a sense it's completely a market definition question.

For a particular group of customers can you profitably raise price to them? If you can't, that sounds a
lot like a guidelines market. So I think that it's properly placed there.

I personally would like to see more emphasis in the Guidelines on discussing these particular issues, not because market definition is the thing to talk about but, rather, because price discrimination, localized competition, large-buyer questions are exactly the context in which you can evaluate some of these competitive questions.

They provide the detail that you need to be able to tell the story, and we are in the story business, after all. So the things that I'd like to see looked at in the Guidelines, the kind of questions I'd like to see addressed, or issues teed up, or lists requested would be:

How can these particular buyers be identified?

Is it profitable to discriminate against them?

And the third kind of question is: Price discrimination requires an apparatus to market to these people, to enforce the prices, all that sort of stuff.

You might have tiered pricing. You might have individual negotiations. There might be individual negotiations with each customer. There's lots of different ways that you can price discriminate, and they would involve costs in terms of the marketing.

That's something that needs to be looked at, where you have a single price for everyone; that's cheaper, a
single posted price, that'd be a cheap thing to do, as opposed to individual negotiation with every customer irrespective of their size. So those are the kinds of questions you might ask on the supplier side.

There are questions on the buyer side. What alternatives do they have? Self-supply is often a question that comes up with large buyers. Do they have downstream buyers so that a price increase might be passed through easily, if everybody uses the same input, for example? Those are the kinds of things you might look at on the buyer side.

There are a whole host of structural factors that you might want to consider as well, the kind that Kathleen was talking about. For example, a coal-mining merger, where do the tracks go? That's an important question, and it may limit the alternatives that can be considered and what can be substituted, or the land use kinds of restrictions that may limit the things that can be considered.

So I think that posing it that way and looking at competitive circumstances in a more narrow group of buyers is often the way to go, a better way to go.

PROFESSOR SHAPIRO: Okay. Thank you, Doug.

Karen, if you would go next.

MS. SILVERMAN: Hi. I'm pleased to be here, as already introduced, to speak sort of on behalf of the
practitioners and counselors. That said, I think a lot of what's already been brought up on the economics is directly relevant.

But what I want to address now is someone who's going to have to live with and try to apply and explain these new Guidelines or the revisions to them, assuming there are some, sort of how we think about the Guidelines and what makes sense.

I'm going to get a little bit descriptive. I think my daughter would say probably bossy. But I have got a couple ideas about what the revisions should do and shouldn't do. Then we can talk about how the factors substantively play out, because I think that is fundamentally the more interesting question. We have got the practical question of how do we render this into a set of Guidelines that then get applied. I think, as Commissioner Rosch mentioned, there is sort of a false sense of certitude that can attach to the words that get into the Guidelines. We need to avoid the risks of that in a couple of different dimensions.

Yes, I agree, that the terse treatment of price discrimination and the absence of discussion of large buyers is probably worth addressing in any revision. The reality is, it's a little bit like the old essential facilities discussions where these are really concepts that are
extensions of principles that are already being applied and
already inherent and innate to the Guidelines and to
Guidelines analysis, but calling them out explicitly and
treating them more fully may well help.

It's with some trepidation that I recommend that
we start adding more words to the Guidelines, because I do
think the words take on a life of their own, and I do think
that there is a false sense of certainty that gets attached
to them on the one hand, or even overreliance.

We've talked about some of the government's
efforts to try these cases and the value of direct evidence;
we won't rehash all of that. But one of the concerns I have
as a practitioner is that that evidence has to be weighed
and evaluated and the skepticism that merging parties are
met with, whether they are arguing about efficiencies or new
entry ought to also be attached to a lot of the third
parties who come forward with sort of the market realities,
as they understand them, complaints about a transaction, and
so forth.

So all that evidence, excellent and important to
collect, but it all has to be looked at, whether from a
trial lawyer's perspective or just from an economist's
perspective on how robust, how viable, how credible, and how
probative. Something in the Guidelines that addresses the
effort to balance these features would be helpful.
What I personally think, the most powerful Guidelines we have and the most utility that the Guidelines can provide is to set out a framework, not a prescription. I think every time the Guidelines try to be anything other than neutral they inevitably get it wrong.

If there is one thing we have all learned -- and I don't want to count, but it's more than 20 years that I have been doing this -- is that no two mergers are really the same. No two industries are really the same. Many industries are not the same year to year, particularly in the Valley and in technology-related industries.

So the most useful concept for the Guidelines are to give us the factors, the tools, the variables, perhaps put some weight on the credibility of those factors or the utility of those factors, but to start telling us when certain -- the large buyers are rarely going to overcome market power or -- I think that is what the Commentary now uses, where rarely would it be. I think that is inappropriate. Frankly, I think it's just wrong, and I don't think it's particularly helpful.

What we do as counselors, obviously, is take a list of factors, apply them to our facts. All of these mergers and the analysis come down to facts and often at a very granular level. So we can apply the facts to those. The Agencies can apply the facts to those variables. We'll
agree or we'll disagree on what the interpretation is, but
you don't really need to get too prescriptive in the
Guidelines.

So with those caveats I would say on the power
buyer questions -- and I do think of it more as a power
buyer set of questions than a large buyer set of questions,
because you can imagine large buyers -- it's already been
discussed -- don't necessarily have market power. Small
buyers don't necessarily not have power.

Sometimes the buyer power is a collection of
buyers. Sometimes it's an individual buyer. So there are a
lot of -- I think we tend to think of it in terms of power.
I think it does go, like the price discrimination questions,
really to what's constraining the merged parties' pricing.

Fundamentally we are talking about competitive
effects. I think not only looking at what constrains the
pricing of the merged entities and before the merger,
premerged firms, but whether the deal itself will have any
impact on that pricing behavior.

That drives you almost directly and immediately
into who are the customers, large or small, collections or
individually, power not power. What's the history? I think
that is an important feature to look at.

Assuming we have a set or an individual power
buyer in a marketplace, you can be sure that they are going
to push back against the merged firm to protect their own interests.

We can discuss whether that is possible or not possible, but the benefits and significance of that collection of power buyers could very well extend indirectly to other purchasers in the marketplace, as well. I think the relevance of that inquiry could be brought out in a new Guidelines.

It's important to understand what the range of competitive responses is to smaller buyers, and what the mechanisms -- I think Dr. Zona addressed it, as well -- the mechanisms and the likelihood of success attached to the ability to push back, or as the Europeans talk about it, countervailing buyer power. All important and relevant.

The Guidelines could be improved, I think, by accentuating the relevance of that inquiry. Interestingly, it's only treated where the Guidelines attach to monopsony mergers. The relevance of buyer power is discussed only in that little section of the overview where monopsony power is identified as being a proper subject of the Merger Guidelines.

For all the same reasons that you could imagine the Guidelines attaching to monopsony mergers, you can imagine it being relevant to a monopoly merger, as well. It seems inconsistent not to address that as a relevant
inquiry.

My own feeling is that the Guidelines ought to neutralize the statements on whether power buyers are likely or unlikely to countervail market power and just identify that as an important inquiry.

I think a separate section on buyer power or price discrimination probably is useful, just because it touches on market definition, competitive effects, entry, and efficiencies. It touches on the entire, you know, analysis. I think putting it all in one place is probably a very helpful thing to do.

On price discrimination, just real quickly, because I know we'll talk a lot about it, I think the important thing for price discrimination to really matter in an anticompetitive way is that it has to be sufficiently systemic. It has to be sufficiently accurate so that it's profitable. All the facts that go into analyzing whether it's going to be systemic or systematic and accurate and sufficient to allow marginal customers to discipline the merged entity, in a way that protects inframarginal customers. It's all very fact-driven.

So, again, I would stay away from prescriptions there. What the Guidelines ought to confirm is that we have no lesser standard or abbreviated analysis in price discrimination markets than we do in other kinds of markets.
There is no, I don't think, principled basis on which we can skip over the competitive effects part of that equation. Quite frankly, I think where that principle has been abused in the market definition world, it's where it tries to sort of bootstrap into narrow markets so that they can sort of presuppose a competitive harm, and they cut short the competitive effects analysis.

I think if the Guidelines make clear that even if you are going to talk about it as a market definition rather than competitive effects issue, at least we are talking about the same fundamental analysis, which includes all the competitive effects questions.

The Guidelines might well want to collapse those two in the case of the price discrimination markets to say in those sorts of markets where we think price discrimination is possible we are going to collapse those two inquiries, and there'll be no distinction between them.

I think two other things will be important to focus on. One is that it is still the demand for the product that drives the price discrimination question, not a set of customer characteristics that might be described.

We had this issue in the Oracle case, and in several others subsequent to it, which is you are still talking about economic markets and lines of commerce that need to be affected. The Guidelines, frankly, should just
address that. It's in the statute, and they ought to repeat it.

So important variables that affect both buyer power and price discrimination: Are the products differentiated, or are they not differentiated? By the way, I think by focusing on the products and the demand for products you get to the same place as if you start with customer characteristics. Where conditions warrant, looking at price discrimination markets in smaller sets of potentially vulnerable customers, like starting with the product characteristics, you get to the same place. Frankly, that is where we start from a practice perspective.

Are the products differentiated, or are they not? If they are differentiated, how? So, for instance, in the lab analysis suppose that those are very differentiated buyers, but a very common product. You can imagine a different set of economic realities than if, in fact, the products themselves were highly differentiated and people were buying them in some cases for resale and in some cases for end use.

Are the products sole-sourced, or do the buyers, these power buyers multi-source? I think in the semiconductor area you see a very different set of pressures because of this multi-sourcing practice. Is the product something that is uniquely sold by the seller, or does the
seller supply a variety of products to these same buyers? Is it a new product, or an old product? Is it subject to these dynamic design cycles? Is it bid out, or negotiated, or is it sold off lists? And, frankly, do the buyers like the deal and why, and why don't they like the deal?

I think fundamentally -- I know we'll get into some efficiencies questions that Carl wants to raise -- it's not irrelevant that important buyers may support a transaction and I don't think necessarily suspicious.

Anyway, two quick things. I think the Guidelines should not try to define what a power buyer is with any kind of mathematical equation or definition. I think that would be an enormous distraction. I think they should step away from this sort of predisposition to say that buyers can rarely offset or overcome the exercise of market power. I don't think that is true. I don't think we could possibly know it. I don't think they should set a standard for relevance of these features that equates or even borrows from the timely, likely, and sufficient entry kind of analysis. Sometimes you hear that. I think that far short of that standard, you could see power buyers having a quite substantial and predictable effect to protect markets more generally.

I don't think you should require that all consumers benefit from whatever disciplining effect the
power buyers may have, and we can discuss that. I don't
think that is the law. I don't think you can measure it,
and I don't think it'll matter in every case fundamentally.

Certainly, you should not presume anticompetitive
effects in a price discrimination market without having done
a fuller analysis. I don't think it really will serve us
well to try to define targeted consumers in great detail,
for the same reason as it's going to be hard to define power
buyers.

It's going to be very fact specific, and I think
ultimately misleading, and probably a false sense of
certainty around that. So I'll take a question, please.

PROFESSOR SHAPIRO: Well, thank you. There was a
lot there, and I have a feeling there is more that you
didn't get to.

Craig, let me ask -- I actually want to ask Karen
a question, too, before you go, so.

MS. SILVERMAN: I'll sit down.

PROFESSOR SHAPIRO: Sit down. Do a dance, or
whatever you're most comfortable with.

MS. SILVERMAN: That is not --

PROFESSOR SHAPIRO: Just a couple things, because
I think they seemed quite useful, and I want to clarify.

One thing you said, it seemed like the analysis of price
discrimination should be based on competitive effects. One
thing is to take the discussion of price discrimination and have it not just be in the market definition section, right? It could be a discussion of effects that has some of the fundamental issues of price discrimination, when it can happen, how we think about it, that would apply potentially to both market definition and analysis of effect.

MS. SILVERMAN: I think that would be both useful and more apt for the -- and I think it would give the Agencies and private parties an opportunity to really explore, exhibit the sort of symmetry in the analysis, which I think right now is subject to misapplication.

PROFESSOR SHAPIRO: Okay. The other question -- I guess, actually, you also mentioned another case that might be useful to throw into the mix. You mentioned in some cases the same product with different prices and other cases different products.

Back in 2000 the DOJ challenged the Ingersoll-Dresser Flowserve merger, which is industrial pumps. The pumps were customized for customers. And we were basically concerned about pumps used in oil refineries and electric power plants. Since they were customized and, in fact, the DOJ said each procurement was a separate market, because the customer would need this pump. It would be customized. There'd be some bidding, and you could look at it that way. That might be another example to have in
While it seems like this Quest example with the labs is the same product, as far as I know, pretty much the same product. We'll take that as our stylized fact. Sold to different customers. So would that be a situation where you would be comfortable going to customer-specific markets or, let's say, markets for industrial pumps sold to electric power plants as a market, or are you uneasy with that?

MS. SILVERMAN: I'm uneasy stopping there. I think it raises an interesting question, but then you have to look at the supply conditions. One of the reasons I mentioned semiconductors -- and there are undoubtedly people in the room here who know more about it than I do -- is that because there is so much multi-sourcing that occurs and so much self-supply that occurs, there are capacity opportunities and resale opportunities. You want to look at all those kind of repositioning questions.

PROFESSOR SHAPIRO: Um-hum.

MS. SILVERMAN: You want to look at the reserve capacity questions. The margin questions. I mean I don't think you can stop the analysis, but at least under the facts that you just mentioned, asking the next question becomes interesting and relevant.

PROFESSOR SHAPIRO: So that seems to relate, Karen, to your saying we should be very careful and there
shouldn't be presumption in the customer-oriented market.

So is that because --

MS. SILVERMAN: I think --

PROFESSOR SHAPIRO: In general, we know the structural presumption has declined over time.

MS. SILVERMAN: Right.

PROFESSOR SHAPIRO: And maybe you are saying that it should be even more carefully applied, if at all, in these type of markets because there is more likely to be some sort of supply-side substitution that somebody who's good at selling pumps to a different category of customers might easily shift and supply them to --

MS. SILVERMAN: Right, because if it --

PROFESSOR SHAPIRO: -- electric power plants?

MS. SILVERMAN: -- four more knobs that need to be turned, and that is what you need to get into that business, --

PROFESSOR SHAPIRO: Right.

MS. SILVERMAN: -- and if it's attractive, that is a different outcome --

PROFESSOR SHAPIRO: Okay.

MS. SILVERMAN: -- than you need to restructure the --

PROFESSOR SHAPIRO: No. I agree that that could be captured under the so-called uncommitted entry or some
other sort of supply side.

MS. SILVERMAN: But I think the discussion ought to all be in one --

PROFESSOR SHAPIRO: Yes.

MS. SILVERMAN: -- place, because I think the tendency has been is that if we can sit there -- if we can define a category of vulnerable customers because they are uniquely sort of inframarginal, then we can start assuming all the competitive effects and therefore bad.

I think that is where we get off track with this. I think if you can back it up and say, no, no, no. You can collapse the analysis, but you have to go through the whole thing.

PROFESSOR SHAPIRO: Okay. So if --

MS. SILVERMAN: Then you are bringing in the uncommitted entrants, and other factors, and...

PROFESSOR SHAPIRO: And that seems to touch a bigger theme, which I think is a pretty wide consensus ultimately when trying to do competitive effects, you have to be careful about any one slice of it if you don't look at the other pieces and take --

MS. SILVERMAN: I think it's a particular problem when we start talking about price discrimination markets, --

PROFESSOR SHAPIRO: Okay.

MS. SILVERMAN: -- though, partly because of how
they have been applied and just partly because the treatment
is so uneven in the Guidelines.

PROFESSOR SHAPIRO: Okay. You've been patient,
Craig. Please, do your thing.

Thank you, Karen.

MR. WALDMAN: Thanks, Carl.

And Carl and Joe and Greg and others should be
really commended. This is a large undertaking, and I think
very worthwhile to revisit the Guidelines every now and then
to make sure it's what we should be doing collectively as a
Bar, and also that it actually reflects Agency practice. So
I really thank them for all their efforts.

I share a lot of Karen's thoughts, as well, which
is having worked together as many times as we have, I'm not
entirely shocked that we come out similarly on some of these
things.

The way I think about the Guidelines and this
question is: Does price discrimination occur in the
practice of the Agencies? Does it happen often enough that
we should care about it, and are the Guidelines adequate in
the way that they address them? That's sort of the way I
conceptualize that.

I think especially in a lot of the technology
markets that I deal in pretty frequently these issues come
up all the time, constantly come up all the time. When we
get a call from a Staff attorney who is indicating that they have some ongoing concerns, hopefully, if I'm doing my job it's pre second request, but maybe post second request, I'll find out a little bit more about what their theory is. They'll say one of two things.

They'll say: We are concerned that yes, you are in a market of five players, but there is a pocket -- it's usually my word -- but there is a pocket of consumers that we think the merging parties can target and price discriminate against, and that is where the localized effect is going to be, or you'll get a different Staff attorney to say: We think this is a market built around the price discrimination theory. That is, a market, it merged into a monopoly, but the market is itself a price discrimination market.

Maybe the economists would tell me if I'm wrong, but I'm not sure in practical terms, in terms of my problem in getting that deal through, whether there is a major difference between the two.

Either way, I have got to convince them that there are alternatives to be found to that particular problem. I think because of the frequency with which it comes up and the fact that I do think the Guidelines are short on the issue, I do think it needs some amplification on what is actually happening and how.
I have no beef with the concept. I think the theory is perfectly plausible. I was in the FTC and it made sense then, and I think it makes sense now.

My challenge over time with the Staff at various points and times has been, when they say: Look, we think you can identify somebody, we think you can target somebody, and we don't think you can arbitrage. Those are the sort of three pillars of the price discrimination theory. I think the arbitrage one is kind of swept away because most people don't see a lot of bartering among technology companies, because there is customization of products or because there may be an extra margin that is going on in that resale, et cetera. So let's sort of set that aside for the moment.

I think the place that I think the Agencies could be a little crisper on is how we, as merging parties, know that that set of customers is somehow beholden to those products. It's one thing for a staff attorney to speak to the person in an interview, that is a confidential interview, and identify them and say: Well, we are really sort of wed to these products, or we are wed to these suppliers, or et cetera, perfectly understandable concern.

I think where when we have pushed Staff to give us a little bit of articulation of how is it that the merging parties know that, sometimes that has been proven in our documents and sometimes it's not, but it's a very tough
issue to get your hands around.

I think the price discrimination theory falls apart rather quickly if you guess wrong a couple of times, because it has to really be a pretty accurate theory in and of itself. What that has led to in my experience has been a real strong reliance on win/loss reports, CRM databases, discussions of who you think you are competing against and why. Those are sort of the juiciest documents that end up being part of this theory.

Again, I don't see anything particularly wrong with that. That's perfectly plausible evidence, but I do think because of that there should be a bit of an expansion in the discussions in terms of what we as counsel are aiming at. I personally think it should be both in the market section and the effects section. Obviously, it's not a big surprise, based on what I'm saying. I think Pam mentioned the coordinated effects theory issue earlier on in her question. I think at some point, as Commissioner Rosch said, it's really all about a competitive story at the end of the day, whether you are saying, I have a price discrimination market and the question is whether other companies can reposition themselves to defeat that price discrimination, or whether you are saying companies don't have the incentive to take share; they've got to follow along with the price increase. That sounds more like a
coordinated effects theory; it sort of ends up in the same point at the end of the day.

I think inevitably the Guidelines need to deal with price discrimination as an element of coordinated effects, or at least address that it's not relevant there if that is, indeed, what people think.

On the large buyer piece, I guess I would say there in the practical reality, as I think of appearing before the Agencies, clients always pound the table about large buyers, and you would like to tell them: If that is the first thing you say at the meeting with the Staff you are going to be in trouble, right. Start with product market. Start with anything else other than saying these guys can protect themselves. But the reality is, it is often the case. Even if they are ten percent of the buyer market, you talk to the business people and they say: Look, I have been mining this relationship for seven years; am I really going to risk that? They buy 20 other products from us, and it's just not in the real world that I'm going to try to raise prices to them.

I think that practical commentary by our client in a company has to translate into some useful mechanism in the Guidelines if, in fact, that is where the Agencies are with that. But I recognize also, the challenge of the large-buyer argument, of course, is that if you argue large
buyers and your large buyers are behind the scenes
complaining, that is worse because then you are saying even
your large buyers can't protect themselves. And then you
have to worry about price discrimination.

So I do think these are two separate issues, Carl.
But I see the large buyer and the price discrimination issue
as sort of inextricably linked and probably should be dealt
with at the same time.

I'm sure we have other issues to address as we
take your questions, but those are my takes on the current
Guidelines.

PROFESSOR SHAPIRO: Thanks so much, Craig. Let me
have a little follow-up question for you, as well. I think
you brought it along nicely how a Staff attorney might call
you and say: We are worried about this pocket of customers'
as you put it. And then you would say: Well, okay, maybe
those guys, those customers have turned to the merging
parties' products disproportionately a lot, but how do you
know they are wedded to them, particularly couldn't switch
to other stuff just because they have done that.

So that gets me to this question about accuracy,
if you imagine targeting these guys by the merged entity.
What happens next, then, can we say something that -- we
could say in order to price discriminate profitably it would
have to be profitable to target these guys and then, well,
it depends on how accurate you are in figuring out these
other guys who have a low elasticity or can't substitute.
Can you say any more about how that works in practice, or
what we might say about it?

MR. WALDMAN: Yes. It's a hard question.

Frankly, I think with Whole Foods, the D.C. Circuit sort of
stopped short of actually worrying about that, because they
said there are inframarginal customers, but they never
really went to the level of saying how do I target them. So
I think it's not only a Guidelines question, it's a case law
question.

I don't have a number for you. I don't say you
need to have a batting average of 400, or 600, or whatever,
but that is where the smarter economists can come in and
tell us what the --

PROFESSOR SHAPIRO: No, no, no. Tom has taught
us, no numbers here. You can't do that.

(Laughter.)

MR. WALDMAN: I think it's a tough question
because you are looking prophylactically at what is going to
happen postdeal. It's not --

PROFESSOR SHAPIRO: Yes.

MR. WALDMAN: -- and I don't know. Some clients
joke when you explain the theory to them of what the
Government is. I wish I knew that six months ago. I would
have probably priced it a little bit differently if I knew they were so wed to my products.

I don't have a good answer, honestly. I certainly think there should be an articulation that pushes Staff a little bit further to show that they think an accurate price discrimination strategy is credible.

Unfortunately, I don't have a really good answer, other than suggesting that in my view a couple of misses probably is not enough to say it, but if you really can't accurately gauge who's going to buy for what and for what reason, it's not much of a price discrimination theory.

PROFESSOR SHAPIRO: So, one way to go would be to say, well, this has to be identifiable by the merged entity if you are talking about competitive effect, or the hypothetical monopolist if you are talking about market definition. And that, based on information that would be available to them, which is different than the information that our Staff may see, okay.

MR. WALDMAN: Right.

PROFESSOR SHAPIRO: I mean so that is I think part of the point. So that kind of description --

MS. SILVERMAN: It --

PROFESSOR SHAPIRO: Maybe I'll open this up to the whole panel now in terms of the conditions necessary in practice to have profitably engaged in price discrimination.
Karen, you look like you --

MS. SILVERMAN: There is another information problem, which is that when you are talking about negotiated markets or bid circumstances, the buyer controls how much information in many respects the seller is going to get. It's about how many people compete for a particular order or how committed they are. So not only do you have to be correct about which of your adherents, but you have to be correct about where their paying points are. There is a lot that has to be right in an environment.

I think the Guidelines could usefully tease out where it's in everybody's interest to give misinformation back and forth, where sellers are posturing, well, I don't really need this. And I've got seven more people lined up behind you, and you better get competitive, versus --

PROFESSOR SHAPIRO: The buyers are posturing.

MS. SILVERMAN: And buyers are posturing. I'm sorry.

PROFESSOR SHAPIRO: Yes.

MS. SILVERMAN: You can imagine it in both directions, actually. I think you have to be careful about -- and this is sort of what I was alluding to in the direct evidence question -- you have to be real careful about not just the quality, but the context in which some of this information comes out. That is setting aside the imbalance
of information, again, -- and Craig alluded to this -- as
between the parties and the agencies who, you know, may have
a much broader market.

PROFESSOR SHAPIRO: Let's take the industrial pump
example, say. So there I could imagine -- I'm not talking
about those companies or that case, but just more
conceptually, -- the merged company or the merging firms,
they have pretty much found over time that they are often
going up against each other for the pumps sold to oil
refinery, say, and, yes, some other companies make pumps,
but they don't appear that often. And they know who's an
oil refinery and who's some other completely type of use.

So then would there be any objection -- I mean it
seems correct to be asking for that well-defined, reasonably
well-defined class of customer, maybe very well-defined,
would a targeted price increase seem possible, based on the
information they would plausibly have?

MR. WALDMAN: Yes. I mean, I think -- I'm sorry.

Were you directing --

PROFESSOR SHAPIRO: No. Go ahead, please.

MR. WALDMAN: I would look -- in fairness to the
Agencies, --

PROFESSOR SHAPIRO: Please.

MR. WALDMAN: -- in fairness to the Agencies, I
think there are situations where you can identify evidence
that suggests that the companies know to whom their customers can turn to.

PROFESSOR SHAPIRO: Yes.

MR. WALDMAN: I think that is reflected in -- sometimes in the amount of times people are reflected in CRMs, as I mentioned, --

PROFESSOR SHAPIRO: Yes.

MR. WALDMAN: -- the databases and things like that. I think it comes up a lot also when the merging parties argue that the customers can make the product themselves, that they can vertically integrate. There's reflections in documents sometimes that say, we know -- I have seen this before -- we know; we are bidding on this thing. It's a six-month project, a six-month RFP, there is a BAFO. They are going to say that they are going to make it themselves if we don't drop prices and if we don't take that seriously. And we have literally seen those kinds of documents.

MS. SILVERMAN: You know --

MR. WALDMAN: But that is the kind of document -- sorry, Karen -- that is the kind of evidentiary basics that I think is juicy for a Staff attorney and probably somewhat required at least for the theory to hold up.

PROFESSOR SHAPIRO: And it seems to me this could apply whatever dimension the price discrimination. You were
talking about categories of customers. It could be geography-type use, purchase history in some of the tricky cases where there is a lot of knowledge that sellers have based on the buyer's purchase history. Investments they have made, --

MR. WALDMAN: Um-hum.

PROFESSOR SHAPIRO: -- training, whatever.

MR. WALDMAN: Um-hum.

PROFESSOR SHAPIRO: And there it seems like it would be pretty plausible you could have quite targeted, even individualized, price effects. And that presents a puzzle for the Agencies in that one is inclined, the economists especially, probably, maybe to say they are a customer-specific market. This customer is not only -- or at least these types of customers, right now they are fine, but that seems like it has some difficulties often when the lawyers are less comfortable, probably for very good reasons. You're grimacing --

MS. SILVERMAN: Yes, I think you are right. I think you could run into your --

PROFESSOR SHAPIRO: -- you are grimacing --

MS. SILVERMAN: I'm sure that's right. I think you run into your line of commerce problems there, which is that it would be -- for a merger that otherwise creates efficiencies for power buyers and others, if you identified
one customer who is not going to be able to defend him or herself against, you know, the merged entities' new magic -- I'm not sure that either is a legal or -- and I don't think a law supports that.

PROFESSOR SHAPIRO: Yes. And I --

MS. SILVERMAN: And it would be some very rare circumstances.

PROFESSOR SHAPIRO: No. Like if it's the Defense Department is the one customer, we get that. But if it -- you know, it's two customers and they are a lot more, that could be too narrow to be significant under Section 7, you would think.

But what about the alternative, saying there are actually quite a few customers we think are vulnerable. It's going to be done on a customer-by-customer basis, the pricing.

And so we think the effects are significant in a broader group, but not uniform.

Doug, you look like you are ready to go.

MR. ZONA: In my experience, I have actually worked with customer-specific markets particularly in the procurement setting. While the market definition comes back to us as a principle in the Guidelines or Guidelines markets, there are other ways to define markets, but under Guidelines structure it's customer-driven -- it's
demand-driven, the market definition part.

So you may well have a series of markets, all separate, but the competitive circumstances are identical or they are very similar across different, say, locations. In the particular context I'm thinking of, it was school milk. The competitive circumstances were different, somewhat different, as you moved up through the geography. Still because the proximity of the various suppliers were a little bit different, but each of those school districts, each of the counties, each of the buying was a separate negotiation. There are separate people who are qualified for the particular thing.

In lots of auction settings there is often a prebid phase or a qualification phase that can take years to go through for some high-tech products. So all that stuff is controlled by the buyer, not by the merging parties in each context.

I wouldn't be so alarmed by a list that has two buyers in the past when that is all that they were looking for. I have done a bunch of work for Phillip Morris, and they looked for three buyers. They want three buyers. They won't have more. They'll have three or fewer.

PROFESSOR SHAPIRO: Three suppliers, did you mean?

What did --

MR. ZONA: Yes, that right. I'm sorry. Three
suppliers. Excuse me.

PROFESSOR SHAPIRO: Okay.

MR. ZONA: Thank you.

PROFESSOR VARIAN: Three buyers who probably wouldn't know a good cigarette.

(Laughter.)

MR. ZONA: Very good.

MR. WALDMAN: Hopefully, we are heading that way.

PROFESSOR SHAPIRO: Before we move on from sort of feasibility and contours of price discrimination, just some other questions. One of the issues that comes up is when the customers themselves compete downstream. They are selling to a bunch of retailers, maybe big, small, or some who seem like they really want the product or immediate goods generally.

And the argument is sometimes made, well, you can't feasibly, profitably price discriminate against one group, because if you charge too much for them they will be disadvantaged vis-à-vis their competitors, and that will undermine price discrimination. Comments on that come up fairly often, I would say. Is that worth addressing, saying something about the conditions under what we would look for to test that argument?

Hal, you might have an answer so, please.

PROFESSOR VARIAN: Yes. I don't know if I have an
answer, but at least I have some thoughts. I would say you would want to look at what is the differentiation in these downstream markets. So, for example, why don't we buy everything at Wal-Mart, because they are the cheapest supplier?

Well, there are lots of reasons. There is convenience. There are different sets of products. There are many other factors. So you would need to look at the structure of the downstream market and see how competitive it really is in a classic sense.

PROFESSOR SHAPIRO: And if we saw pre-existing price discrimination across the different downstream firms, that seems like it might suggest that it is profitable to do that, notwithstanding downstream competition?

PROFESSOR VARIAN: Well, right. And to me it would also suggest what is the source of that price discrimination. There has got to be some sort of differentiation that is going on in those downstream markets to support that.

PROFESSOR SHAPIRO: Okay. That's good. Let's see.

Let me move us forward a little bit. And there are two, well, there are three or four questions from our questions that we posed to the public that are relevant here.
One we have already addressed, I think, which is, is it worth elaborating on the two paragraphs in the Guidelines on price discrimination. And I'm hearing general assent, if we do it wisely, at least, and don't screw it up.

Let's talk about the geographic aspect of it. I would say most of the cases where we are defining relevant geographic markets it's based on customers located in certain areas who would be vulnerable rather than based on the location of the producers.

The Guidelines start at least with locations of producers. This is question number six from our public line:

Should the Guidelines be revised to state that geographic market may be defined based on the locations of customers, rather than or in addition to the locations of suppliers, depending on circumstances.

The Guidelines do provide for that, but it's kind of in an oblique way and secondary way. So your school milk example is maybe one that fits that. Perhaps others have thoughts on that premise.

PROFESSOR VARIAN: Well, the two examples we have talked about here. One is there are very different requirements in different geographic areas. So that was the textbook example that was brought up earlier, so it may
affect entry. And then the other issue would be, what are the real transportation costs historically and potentially, because there is an impact there in terms of what potential competition could look like if we adopted some new technologies, irradiated milk, and that kind of thing.

PROFESSOR SHAPIRO: So here's an approach that makes sense to me, at least. Take the textbook supplier case where the State of California, I guess, that has particular, hopefully, very wise, requirements for the textbook, and maybe have a merger between two companies who supplied a lot of textbooks in some category to California, but they have much smaller shares in Texas or there are other states, okay. And what would we make of those large shares selling to California?

They are presumably -- if we define the market as textbooks just sold to California schools or students in California schools, we would count, in measuring shares, sales for wherever the textbook happened to be printed or wherever the publisher resided. That would not matter. So we would just define the geography based on the customer so we wouldn't have to worry about the locations of the suppliers? Is that --

MS. SILVERMAN: But I think you would want to look at the demand, where does the demand arise. It's not even
so much the definition of the customer. It's that these are California-driven sales. So you start from that perspective, and so you get to the same place, but you are not starting with the customer. You're starting with the demand.

PROFESSOR SHAPIRO: Okay.

MS. SILVERMAN: And that is a --

PROFESSOR SHAPIRO: Hal?

PROFESSOR VARIAN: And one of other cases you could contrast this to is the example Kathleen mentioned this morning about California having a unique gasoline mix. So then we have got this question of, yes, there is this specific set of consumers that have very specific requirements, and what are the markets that can supply that. Of course, there would be other ways to deal with this by allowing importation of noncompliant gasoline if there were certain supply conditions met, et cetera. So there is a case where the transportation costs and what the substitutes really look like is pretty critically important.

PROFESSOR SHAPIRO: Well, let me ask -- one of the issues, then, if think about geographic markets. I know it's not the most natural thing for a lot of high-tech products, but the geographic market, whether it's the textbooks or some other product that has transportation costs, let's say, let's go with the textbooks, just because
we have it on the table now.

So you measure shares plausibly by sales into California. Of course, you would have to consider the ease of entry of somebody who could modify their textbook that is not for California so it's suitable for California. Definitely an important issue. That could even come under uncommitted entrants, for example, because it's easy to do quickly.

Now maybe I'm thinking more in physical products. Sometimes the question, then, what about companies that are outside, that sell a little bit into the relevant geographic market. The textbook doesn't work for this, but more of a industrial commodity. And they are kind of at a disadvantage because they are produced far away. They ship a little bit in to these customers. And then there is a debate about whether they should be measured based on their sales which might be small, or based on their capacity which might be much larger and it is used for other customers in other geographies.

This is a nontrivial example of a case at least for DOJ where we do a lot of these, sort of manufacturing industries. Comments on that issue, recognizing that whatever we do with measuring the shares, of course, we don't want to go too -- we don't want to put excessive weight on the shares, but we do have to do it. This too
much of a steel industry question for Stanford, for Silicon
Valley?

MR. WALDMAN:  I think it's something that comes up
often, which you would think about addressing, is
reputational issues outside the country. There are often
technology markets where the Asian communities have a pretty
strong presence locally, but they are not selling into the
U.S. And you ask the question, well, if the price increased
here, they are selling -- they are on the fringe. They have
got a single-digit share, or something like that, if the
merging parties tried to increase price that would naturally
invite some of the Asian competitors in more fully.

And, you know, sometimes that is compelling and
sometimes, frankly, it's not, either because they feel wed
to the, e.g., Japanese market, or because people will say,
well, I'll take a test run with that company, but I'm not
going to shift my entire purchase schedule from the merging
parties to them. And that is not enough of a disciplinary
force. I actually do think it occurs sometimes in
technology markets.

PROFESSOR VARIAN:  Yes. I would say that one
question is: Well, why does this potential entrant or
potential firm that could increase its supply significantly,
why does it have a small market share now? Is it for the
reasons you described, that the company is worried about
multi-sourcing, or is it because the product isn't exactly right for the domestic market, et cetera, et cetera? So you would have to look at the facts with respect to what explains the current situation.

PROFESSOR SHAPIRO: And that might be the reputation qualification.

PROFESSOR VARIAN: Absolutely.

PROFESSOR SHAPIRO: It could be their capacity is utilized somewhere else profitably, but the Guidelines would recognize that.

Doug, you had a point?

MR. ZONA: I think that this comes up all the time where there is a significant foreign capacity, mergers like that, where there is something produced offshore.

But it also highlights why we shouldn't be doing this. The answer to the questions are competitive ones.

Why doesn't this Asian producer count? Does their capacity count fully? Do their sales count more, then it doesn't fully reflect their competitive significance?

The answers to those questions have to do with individual circumstances and how they are perceived by buyers -- it's kind of the guts, the context of the story that you are trying to tell. It's a competitive story, not a market definition kind of thing.

PROFESSOR SHAPIRO: Well, if we take that example,
the one with the targeted customer, the certain-type example, I think the Guidelines basically say this, but maybe not as best they could -- if we are going to get into the business of measuring shares, which we are going to do to some degree, we want to measure shares based on the competitive significance in the relevant market, which could be geography to sell to these customers, and then we want to somehow account for the ability to expand.

So one could emphasize that and how it's done in price discrimination markets in general, without being prescriptive, you know, that could apply general principles.

Karen, you --

MS. SILVERMAN: Well, I'm also thinking that there are other dimensions, like duration, that you would want to count, too. If you are looking for the discount factors off share, I mean, whether it's technology or textbooks, I mean, you need to look at the buying cycles.

The different industries that we have already talked about today have very different profiles in terms of the competitive significance, again, of these purchasing decisions and the sort of durability of them.

It seems to me that would be very relevant. If you are looking at geography and other dimensions, I would look at duration as a dimension, too, that could either discount or diminish the significance of a share that you
could measure yesterday.

MR. WALDMAN: You know what else, it does come back to large buyers again, because I think the one area where they are more of a compelling influence is in sponsoring entry or at least threatening to sponsor entry, or bringing -- maybe it's not officially entry. Maybe they only have one percent, but bringing them up to speed in a way that is more of a competitive threat.

So I think in your situation if there is somebody who is offshore and somebody's going to attempt to try to raise prices to the local customers, if a large customer can turn to them and say, well, you can go ahead and try to do that, but we are going to shift things over to this company, they don't have to do it. They have got to be threatened to do it, right?

PROFESSOR SHAPIRO: Take retail or various industries such as retail that have seen consolidation. So that argument, one could test it. One should presumably test it and say, well, has that happened in the past where they have moved a lot of business offshore, or is there some problem, like you said, well, they are not really sure about the quality of the products they would get from offshore. And they might only do it gradually.

MS. SILVERMAN: I have seen circumstances where a customer has threatened to skip a cycle, just: We are going
to sit this out.

  PROFESSOR SHAPIRO: In terms of where there are product improvements? Is that what you mean by a cycle?

  MS. SILVERMAN: Yes. We're going to go stick with this policy, and we'll just skip you next time. Maybe we'll come back to you next time, the one after that.

  PROFESSOR SHAPIRO: And buy it from somebody else or some other facility?

  MS. SILVERMAN: Buy it from somebody else, or defer a purchase, or whatever, whatever it is. That is why I keep coming back to it is so factually specific. And you have to look at the quality of information and the credibility of that information. Is the threat real? Is it --

  MR. WALDMAN: The interesting thing about Karen's -- sorry, Carl.

  That has come up in some technology situations. It happened in software in particular. They said, well, there is a next round every six, eight months, 12 months, whatever. We'll skip this next version.

  Some Staff attorneys have said -- and it's an interesting debate -- well, that is a potentially competitive effect in and of itself. The customer shouldn't have to skip generations to try to protect themselves. That is an effect.
So it kind of comes back a little bit to this morning's discussion as to what is an effect and what is not. I just want to throw that in because I think it's the threat that matters that keeps people disciplined. But if they are stuck skipping a cycle some in the Agencies have said that that should be an effect in and of itself.

MR. ZONA: I have been in in a procurement kind of situation where you get a contract, a couple-year contract, and the buyer will say -- they will take a look. They'll put their feelers out, look at the market and say: Well, I don't think it's worth it for us to put this out to market again. We are just going to negotiate a little bit on our contract and extend it.

So they are making a decision to skip the market, so to speak, for a moment and come back later, but they are still getting lots of competitive benefits in terms of just having that be out there, even though they don't participate.

PROFESSOR SHAPIRO: Well, this is actually an example where the Guidelines betray their history in industrial manufacturing. They just talk about durable goods, but software is pretty durable. Now, of course, the main thing is it's improving and that gets us to nonprice dimensions of competition again, which I think goes to your question about what do we make of it if they defer.
Presumably, it's the threat. The threat's enough, then --

MR. ZONA: Right.

PROFESSOR SHAPIRO: -- we are good, yes.

Let me move this over more specifically to the large buyers. It's come up a couple times. A number of you have mentioned it already.

Let me read for everybody a passage from the 2006 Commentary to see whether people will say, oh, that is great, you should put that in the Guidelines or, oh, my God, it's no good. Don't do that.

So here it is. "In assessing the merger between rival sellers, the Agencies consider whether buyers are likely able to defeat any attempts by sellers after the merger to exercise market power. Large buyers rarely can" - - yes, rarely, Karen. You noticed that.

MS. SILVERMAN: Right. You know where I come out on that one.

PROFESSOR SHAPIRO: Yes. You are on record on this. Okay.

"Large buyers rarely can negate the likelihood that an otherwise anticompetitive merger between sellers would harm at least some buyers. Most markets with large buyers also have other buyers against which market power can be exercised, even if some large buyers could protect themselves. Moreover, even very large buyers may be unable
to thwart the exercise of market power."

And, Craig, you mentioned this in terms of, we have really got to look at the business reality of what we are seeing. If one could describe the circumstances and things one would look at to determine whether the large buyers could protect themselves and/or others. So, could one work with this and add to it in a descriptive, perhaps, rather than postscriptive way? Reactions?

PROFESSOR VARIAN: I'll just say that to me it's just an assertion. It's not saying why or what the --

PROFESSOR SHAPIRO: That's the beauty of Guidelines.

(Laughter.)

PROFESSOR VARIAN: -- are. But, it seems to me there are some instances or situations where why is it that these firms can't rarely negate the exercise of market power.

PROFESSOR SHAPIRO: The why. Okay. Why, then, would lead into, presumably, the types of things we would look for to test claims that large buyers would save the day, so to speak.

Karen, your...?

MS. SILVERMAN: Well, if I were rewriting this, I guess I would start with the proposition that it is possible under some circumstances that they could or they couldn't,
if you wanted to put your bias out or not, but -- not your personal bias, but I'm just saying, a bias into the Guideline. You could say it is possible because of the things we look at to determine whether it's true or not. I don't know that rarely is it meaningful or useful term in its --

PROFESSOR SHAPIRO: So let's set that aside. I don't want to quibble over that, I guess. I think you make a good point.

MS. SILVERMAN: I'm not sure it's a detail, because what it is attached to is this question about whether you should be focusing on some or one customer who's vulnerable. And so I think it marries up into the line of commerce questions.

PROFESSOR SHAPIRO: Okay. That's fair.

Well, one thing I think Hal said is that -- at least an important part, if not the key, central part of this analysis should be: What are the choices that the buyers have, particularly with the bargaining negotiations?

What did you -- maybe even use the word outside option. So that could be mentioned. And it's not really mentioned here. Okay. I don't think that is a thing we look for. What are the outside options, and how they would be affected?

MS. SILVERMAN: So one of the things I think we
are talking about is it's not just a categorical listing of suppliers. It's also tactics, bargaining options, alternatives. It's what are the strategies and mechanisms that buyers can use to withstand, overcome, resist. So it's broader than just counting up suppliers and producers.

PROFESSOR SHAPIRO: Okay.

MS. SILVERMAN: It's --

PROFESSOR SHAPIRO: Counterstrategies. Would they --

MS. SILVERMAN: It's all the competitive response stuff, --

PROFESSOR SHAPIRO: Okay.

MS. SILVERMAN: -- in my mind. And I think that is what is missing from this discussion.

PROFESSOR VARIAN: Yes. I would say that was the sort of thing I had in mind when I said you should look at this as a bargaining problem. If the good is typically sold by one-on-one negotiations, and every one-on-one negotiation is going to involve exactly those considerations, the threats, the counterthreats, the alternatives, the options. And those would be the relevant factors in looking at what would happen when the competitive conditions changed.

PROFESSOR SHAPIRO: I think we, who are in this project, are all aware we don't want to have a 150-page, detailed thing that is going to describe all that in the
world. The cases are very different.

But, at the same time there are some principles that seem relatively clear that can provide useful guidance, such as how will the merger affect the relative bargaining position or can the big buyers respond with counter-strategies, and then how might that affect other buyers.

Then that gets to your question about, if there are a few small buyers who are left with the vulnerability, that leads to another question about what are the ultimate market-wide impacts or impacts.

MR. WALDMAN: One thing you might want to think about which is a little, slightly off point, is that I think it's the IP Guidelines that actually have examples and hypotheticals. I know this is giving you a ton more work, but you may want to actually, under certain sections, give a little bit of meat to the bones by giving hypotheticals and answering them.

PROFESSOR SHAPIRO: Well, one of my questions for public comment was whether we should do that. And I'm glad that you have answered it.

(Laughter.)

PROFESSOR VARIAN: Let me follow up on what you just said, because if there is price discrimination before and then the merged firms merge and there is price discrimination after, it may be that the small buyers are
not necessarily getting a worse deal. They are getting the
same sort of deal they were getting earlier. So it's the
change in the position of small buyers that is going to be
the most relevant issue.

PROFESSOR SHAPIRO: All right. Well, let me turn
to some questions from -- I see at least one important
person trying to ask a question. So let's do a few
questions from the audience before our lunch break. Okay.

COMMISSIONER ROSCH: Is this on?
PROFESSOR SHAPIRO: Yes.
COMMISSIONER ROSCH: That's the trick.
PROFESSOR SHAPIRO: Questions from the audience?
COMMISSIONER ROSCH: No. You just put the
question perfectly, because that is the trick. You have
identified a myriad of considerations that need to be taken
into account before you determine that the transaction is
going to have an adverse effect on competition from a price
discrimination standpoint.

The trick, however, is to distill those into words
of one syllable that are not going to be 20 of the sort that
Karen identified, for example, but are rather going to be
five of the sort that Hal talked about. That's what the
trick is. And I don't envy you that task, but that is
basically what we are going to be focusing on, because those
five have to be broad enough, from the standpoint of the
Commission, at least, that we can go in to court and we are
not going to be imprisoned; we are not going to be penalized
for not having the more fulsome list of things that Karen
talked about.

So the five have to be broad enough to embrace
those 20, and that is the trick. It's a tough thing to do,
but I think that is what you need to do.

PROFESSOR SHAPIRO: I will pass that along to the
Commissioners so that they appreciate the public input. We
are agreed. It's a balancing act. I think you used that
term, "balancing act," as well.

Other questions?


Just in the context of large buyers, I wanted to
pick up on something Craig mentioned earlier, which is we
often hear in cases that merging parties will mention that
the customers have other things they are buying besides the
products at issue in the merger. And those are really the
source of leverage, the source of bargaining power. I
wondered if the panel could comment on what significance
should be given to that argument and in what circumstances
that might be persuasive and in what circumstances it might
not be.

MS. SILVERMAN: Just a couple things.

One is, like Craig, I think it's useful from a
practice perspective to start with, okay, well, can we
identify the group of customers who are most at risk or most
vulnerable and what do we have to say about them.

I think one of the other things I ask my clients
is what, in fact, keeps you up at night. And very often
it's what you are describing right now, which is these guys
have me so into them for the 48 other things that they buy
from me that there is no way I would -- and you ask it in a
very real world way, and you'll get those real world
answers, which is -- and that is why I start with: Well,
what actually constrains your pricing in this category. And
it may well be something sort of buried, if you will, and
sort of not front and center in the Guidelines-type
analysis, as that multiple-purchase scenario,
multiple-product scenario.

MR. WALDMAN: Yes. And I think the scenario that
you just posited, John, is the one that happens the most
often in large-buyer scenarios that I have dealt with which
is, you look the salesperson in the face and you explain
what the theory might be. And you say: I have been working
for three years to try to sell them all this other product.
Whether it's Wal-Mart and you want shelf space or something
else -- if you look at the economics of increasing this
price one percent, would I stand to gain on that by losing
these other sales in this other market or dramatically less,
and I'm not going to engage in that strategy.

There may be an economic reason to explain this.

So that is not a really, truly sound discipline strategy, because you are not going to opt for another product in that other market. But that is sort of a real world, and economics may not be exactly overlapping in this scenario.

MR. ZONA: Buyers and sellers tend to commit to one another, not always, but often if it's large buyers they might locate close by or change the distribution system so that they can accommodate that particular buyer.

All those things are investment -- they are sunk. So they matter, but they are very difficult to include in a HHI, even at the customer level.

PROFESSOR SHAPIRO: We are well past the HHIs in this discussion, I think.

Others?

MR. FARRELL: Yes. So one follow-up on what you were just talking about, it's all very well to talk about sellers sleepless at 3:00 a.m. worrying about losing their customer if they increase this price a little bit. But if that were really such a big worry for them, they would be inclined to reduce the price a little bit so as to reduce the probability of losing the customer. And apparently they have seen fit in the past not to do that.

So the fear of losing customers is already built
into the demand elasticity. And by hypothesis we have some reason to think the merger will reduce the demand elasticity of this particular customer. So why doesn't that already take into account these concerns, as opposed to you have to bring up these concerns as a second-round check after you have thought about demand elasticity. That's something to ponder late at night.

MR. WALDMAN: And herein lies the economic difference from a business reality of when we talk to our clients.

MR. FARRELL: Let me ask you a different question that might seem easier or more interesting to respond to. You've been talking about price discrimination. We are, of course, very concerned -- I certainly am -- with nonprice aspects of competition and possible nonprice effects of mergers.

Is there a concern about nonprice discrimination, quality discrimination, innovation discrimination, stuff like that, or is discrimination really an issue that is most likely to surface in the form of price?

MR. WALDMAN: I think it's far and away more likely to appear in price just by the way bid markets work. I think you are less likely to pull back on the quality or innovation in a bid postmerger than you would just be tweaking the price. That's my experience, at least.
But I guess logically it doesn't necessarily have to be that way, but my experience in those defined markets it's far and away more common that you are worrying about price.

PROFESSOR VARIAN: Well, I would say one thing. One thing we examined, actually in information rules, we talk about one advantage of having a product line and selling in differentiated markets is you can keep moving the product up. So what was last year's luxury good now becomes the mainstay of the market, and there is a new luxury high-end product for somebody else.

So in some sense this idea of competing across an entire product line gives you kind of natural force for innovation, of moving a product quality forward.

PROFESSOR SHAPIRO: Maybe we'll take one more question.

Gil, Gil.

MR. WALDMAN: Oh, here comes a better question.

MR. OHANA: This is something that has been touched on a couple of times, and it's probably a better question to ask Commissioner Rosch than anybody else. But since he's not on the panel right now, I'll throw it to the panel, which is:

What do you do in a deal where there is a small set of customers you can reliably predict the deal's going
to be bad for, but it's neutral or maybe even positive for others? How do you weigh those, and would the Guidelines say anything about that?

PROFESSOR SHAPIRO: I'll take a quick -- not that I should be answering questions, I suppose. I suggest prosecutorial discretion, which can cover a multitude of sins, no doubt.

MR. WALDMAN: Spoken kind of like a lawyer, Carl. That was impressive.

PROFESSOR SHAPIRO: Thank you.

PROFESSOR VARIAN: That's an answer?

MR. WALDMAN: Yes.

(Laughter.)

MR. OHANA: -- one had like a ten-percent figure for safe harbor?

PROFESSOR SHAPIRO: Tom, do you actually want to say anything about it?

COMMISSIONER ROSCH: I think the point that Karen made a little bit earlier is correct, though. And that is the statute itself imposes a requirement of substantiality. If and to the extent that you are talking about a sufficiently narrow group of allegedly exploitable customers, I'm not at all sure you satisfy that statutory standard.

PROFESSOR SHAPIRO: The other things I'd say, Gil,
is we take seriously the consumer surplus, consumer welfare
standard in merger review. If you had harm to a few, a
small group, and benefits to a broader group, even maybe
smaller benefits but for a lot of them that would be
beneficial, then you need to show they are inextricably
linked to the other stuff. So there. That is the
moderator's answer to the question.

All right. Let me thank the panel. Let's break
for lunch.

(Luncheon recess taken from 12:47 p.m. to 2:04 p.m.)
MR. FARRELL: Good afternoon. Welcome to the afternoon session. I think we'll get going, since it's the appropriate few minutes past the advertised time, a little bit of puffery without any actual deceptive practices.

This afternoon's first session is entitled Unilateral Effects. Just to very quickly go through the panelists, for identification, I won't give the distinguished bios, on the far left, my far left, your far right, we have:

Michael McFalls, who's a partner from Jones Day;

Next to Michael is Larry Popofsky who's from Orrick, Herrington and Sutcliffe; then Dan Rubinfeld who's the Robert Bridges Professor at U.C. Berkeley and Senior Consultant Compass Lexicon; and on my immediate left
Dan Wall from Latham and Watkins.

What I'm going to do is follow the practice, I guess of at least one of the panels this morning, and just talk for a couple of minutes myself, maybe a little more than that, setting things up a little bit. And then I'm going to ask each of the panelists if they have opening remarks. And I'll ask them, I hope, provocative questions.

So the first thing I wanted to say is following up on a promise that I made from the audience earlier this morning, although the panel's entitled Unilateral Effects, one of the questions that I had identified is really about the relationship between unilateral and coordinated effects and therefore, perhaps to some degree, about coordinated effects.

If you look at the descriptions of unilateral effects and coordinated effects in the 1992 Merger Guidelines, the descriptions are very different. And they make it sound as if these are two very different kinds of animals. In the Unilateral Effects section, we'll talk more about what unilateral effects are and how you diagnose them and so on. The Coordinated Effects section is, I think it's fair to say, very much inspired by thinking about firms getting together, coming to some kind of explicit agreement, not necessarily involving the use of illegal means of coordination, but they all understand what it is that they
all expect each other to do; and, by golly, we're going to
discipline each other in a fairly deliberate kind of way so
as to make sure that we all stick to that agreement.

Well, I certainly would call that a coordinated
effect and the unilateral effects described elsewhere in the
Guidelines that also call that a unilateral effect. But it
does raise the question of whether there might be a gray
area, perhaps a rather large gray area, that's in between
those two modes of oligopoly conduct.

What I have in mind very particularly is the
following, which it seems to me is actually quite a common
mode of oligopoly conduct, and the question is where does it
fit, is it supposed to fit under unilateral, is it supposed
to fit under coordinated? And, if so, does the description
of one or the other of these forms of conduct need to be
changed in order to better reflect and communicate that we
have in mind to include this form of conduct.

So what's this form of conduct that I'm concerned
about? It's where there's no agreement and established set
of punishments for deviation from the agreement, but neither
do the firms act completely independently. I recognize that
if I change my price or introduce a new, improved product,
my identifiable rivals are probably going to respond and
react not so as to punish me but because their competitive
environment is somewhat changed and so they're going to
If I take into account that my competitive initiatives are going to be responded to, typically in a way that means that when I cut my price, others will cut their price; when I innovate, others will scramble to innovate, that's going to blunt the incentive for me to do any of those things, because it basically means that instead of my taking as given the deals offered by the other firms and seeing where I can profitably offer consumers a better deal, I'm thinking about what happens when we all offer consumers a better deal and is that good for me.

So that form of oligopoly conduct, to the extent that that's being observed in the real world, which I think is a large extent, is that supposed to fit in the Unilateral Effects section, so unilateral effects are not just about static, simple modes of competition with full independence or is it supposed to fit in the Coordinated Effects so coordinated effects are not just about common understanding with detection and punishment. Or is it inevitable that there's a gray area in between and, if so, what should we do about it?

So I'll have some other questions to hit the panelists that are perhaps more narrowly on Unilateral Effects, but since the relationship between unilateral and coordinated effects came up earlier, I thought I'd try to
frame the unilateral effects discussion by saying: As compared to what.

Okay. So with that set-up, let me ask the panelists to deliver any opening remarks they have in the order in which I introduce them, so we'll start with Mike McFalls.

MR. McFALLS: Thanks. And I'm going to sit down here as long as the other panelists and the audience don't mind. My knee hurts. Joe said that we'd have five to ten minutes of opening remarks, and I promise not to go longer than that and probably will be considerably shorter.

I come at this from the perspective of somebody who doesn't go to a courtroom. I do most of my work in front of the Agencies and often outside of the Agencies, before we even get there. I have seen the application of unilateral effects models in industries, ranging from satellite radio to shampoo to cigarettes, to just about every product under the sun. Of course when I was at the FTC in the late '90s, I saw the application of the theories then.

To me maybe it's a result of time and experience, but these are pretty understandable, comprehensive, applicable models. There's been innovation and practice reflecting economic learning over time. And now it's bubbling to the surface in the form of the UPP that we've
already discussed today and earlier forms of that, like the PPI by Salop and O'Brien.

All these things are good things. The defense lawyers often make use of these even before the Agencies do. With the UPP, in particular, I know that before I ever heard anything from the Agencies, we had one of our consultants come to us and recommend that we try to do something with this and use it affirmatively. I think that's largely true of a lot of differentiated products theories: They're used originally to defend mergers, showing that you're not really close together in product space.

So, generally, you look at the Guidelines and you look at this section of the Guidelines, and I look at a lot of the comments and I'm sort of puzzled by people really want to change. Of course it's my inclination as a defense lawyer to want stability. The greatest boxing trainer in the world right now was being interviewed. He trains Manny Pacquiao. He goes: When I watch film of an opposing boxer, I don't look for weaknesses, I look for patterns. I think that a lot of defense lawyers do, so a lot of defense lawyers are going to be uncomfortable with significant changes in the Guidelines.

But if the significant changes are nothing more than the things that we've been looking at for a couple of years now, not only should we be comfortable with it, just
as a matter of principle they should probably be reflected in Guidelines. And even though things like the UPP are not widely practiced now, if they're going to be used by the Agencies in their particular circumstances, and it's going to continue to be that way, then why not put them into the Guidelines with the proper caveats?

Obviously I don't need to advise the Agencies on the dangers they face in doing this, but once you put it in the Guidelines it suggests that if you're in those factual circumstances and you don't have the data, then you don't have a presumption, period. So the Agencies need to be careful and should be careful anyway to make clear what's pretty obvious, which is this is just a tool, like everything else that we do in merger analysis, and is going to be used in conjunction with all the other evidence that's going to continue to be collected during the second request process. We know that's not going to change any time soon. If it doesn't, then why not make use of the documents?

The documents really tell the story. It depends on viewing all of them in their proper context, but you have to use the documents in conjunction with economics to come to an appropriate understanding of whether or not transactions are going to result in unilateral effects.

So if the UPP works, should it be the exclusive touchstone for liability in a unilateral effects case
involving differentiated markets? I don't think the authors
originally imagined that it would be more than a screen at
this point. And certainly there are reasons that you
probably don't want it to be the exclusive touchstone that
I've already talked about. When you look at diversion
ratios you're going to have to come to a consensus about
what the proper proxies for those are. You're rarely going
to have direct evidence of diversion ratios.

My experience with agency staff thus far is that
there is a very wide division of opinion among agency staff
and of course with defense counsel over what those proxies
should be in a given case, and that's after a lot of
investigation and discovery.

Can you use turn in telecommunications industries
as an indirect proxy for diversion? Can you use
longitudinal usage data in prescription drugs? Everybody
knows that those don't necessarily reflect changes due to
price changes, but do they reflect nothing?

Are you going to simply say that if it's not
perfect evidence we're not going to use it all? And if
that's the case, then you really have to think about what
kind of Unilateral Effects Guidelines you're going to want
to have. When you look at the ones we have today, they work
fairly effectively.

That said, a couple of points. Nobody really
thinks that the 35-percent threshold is workable. I use it internally, just as a guidepost to think if we're not over 35 percent in a reasonably-foreseeable market it's less likely that we're going to have a unilateral effects problem. You can't reasonably counsel that it's impossible that you're going to have one.

Should it be used as a baseline for presumption of potential anticompetitive effects? You know, if you want to keep it, keep it, but realize that people are going to continue to think of it as a safe harbor if you fall below it.

Of course the biggest safe harbor is a more subtle one, which is are the Agencies going to continue to focus on whether or not you're the first and second choices for a significant number of customers. Well, if you look not just at the UPP but at more complex economic simulation models that take in a lot more data and variables, the answer is no. You can have unilateral effects if you're the first and third choices or first and fourth or second and fifth choices. It depends on the assumptions that you have and the data that you have.

And if the Agencies and the Bar are honest about that, then I don't think you can limit a unilateral effects case to firms who use products of the first and second choices for a significant number of customers. But, that
said, if you're going to use first and second choice as the

touchstone, then I think that one mistake that I continue to

see from the staff is thinking that if a high number of

users of Product A would go to Product B in the event of a

price increase, that means that they're first and second

choices for a significant number of customers. And that's

not true. That's a significant number of customers of the

merging products. But significance in the Guidelines, and

maybe this is just a misreading and maybe suggests an

ambiguity that needs to be corrected, significance must

refer to the relevant market. I mean it can't be referred

to the merging products themselves.

So, with that thought, I'll conclude my remarks.

MR. FARRELL: Thank you.

Harry.

MR. POPOFSKY: Well, thank you. I'm very pleased

to be here with such distinguished colleagues, at least

panelists, they're not exactly colleagues.

I was at a loss to know exactly what I might

address today. I thought I'd get some inspiration from

George Clooney, "Up in the Air," but it was about another

subject, so I turned to a source who I know some of you know

which is a better source, my son Mark at Ropes Gray.

And I said: Son, what do you think I might

address?
And he said: Don't worry. With that panel you won't have to say anything.

(Laughter.)

MR. POPOFSKY: But I have an opening allotment. And with an opening allotment, I figure I'll take my shot, nonetheless.

I start with the conviction that we are dealing here with an administrative regime, intending to implement a rule of law, principally Section 7. This is not simply an exercise in applied economics, but it requires some adherence and some respect for established precedence, it seems to me, as established in the courts. And I predict the courts will not depart from analyzing a range of factors in defining the market and what effects are substantially, and I will underscore the word in the statute as Commissioner Rosch did in his comment earlier, what substantially may lessen competition or create a monopoly.

I have no doubt that economic models may be useful in addressing that issue, but they invite a duel with alternative models based on different methodology and different data assumptions. And for that reason almost alone courts are not, in my view, going to accept arithmetic algorithms, if that's what they are, in lieu of market definitions and market share indices in trying to assess whether there is a risk of untoward market power by reason
of a merger transaction.

I believe there is a significant risk of disconnect between the administrative approach to the rule of law and then in the courts. That disconnect imposes a degree of uncertainty and unwanted cost on the economy. And I have in mind my brother Dan's case, Oracle, which may be an example of that. Whole Foods may be an example of that. But it does seem to me that the administrative process has to be geared to what should be anticipated in a court of law.

I certainly accept the desirability of administrative safe harbors, such as those seemingly intended by the original HHI Guidelines, but the search for the holy grail, combining simplicity with accurate predictability, has the potential to miss price constraints imposed by real-world conditions and competitive responses by other actors in the market. And that of course is the question which was posed by Mr. Farrell at the outset: Can you really compartmentalize and what about the gray area in between.

However comfortable one is with the assumptions of the model used to isolate potential unilateral effects, in my view, having read far too many articles on the subject in the last week, it is inherently at risk in terms of getting it right, given its dependence on diversion ratios,
standard-efficiency offsets, assumed pass-through rates, buyer-demand curves, any and all or all combination of them.

The risk of error one way or the other on each variable is concerning and potentially costly, in my avocation. I'm more or less a historian, not a mathematician. I remember Long Term Capital Management, where our economy was almost brought to its knees by the use of mathematical models based on a data stream which the Nobel laureates after the fact said was too narrow historically. Niels Bohr I think it was said, quipping, that it is a very difficult thing to predict, particularly about the future.

Beyond obvious cases, which are likely to be caught by refined and improved market power screens, perhaps updated HHIs which reflect what actually goes on rather than what appears in the current Guidelines and perhaps even, and I am fond of it, the old 35-percent standard. Justice O'Connor didn't shy it away from it in Tylenol when she used 30 percent. Any screen can only be a starting point for analysis and should not, in my view, be elevated into a presumption.

I'm skeptical about any proposal to rewrite the Guidelines to give economic models pride of place when a wealth of other market information is available and necessary to assess a merger in the round, as it were. The
temptation in the administrative process to short change
nonmathematical evidence, that is to say, deprecate such
things as competitive response, buyer response, entry, and a
myriad of other concerns, suggests that the overriding
principle in any rewrite of the Guidelines is that which is
captured by Mies van der Rohe's maxim, "less is more."

With that, I'll pass the baton.

MR. FARRELL: Thank you.

Dan.

PROFESSOR RUBINFELD: Thanks. As the only
economist on the panel I feel like I should make a speech
for economic models, but I'll forego that for the moment.

Many of the comments I'm about to make reflect a
joint submission I've done with Richard Gilbert and I should
just exempt Rich from the comments I'm going to make towards
the end of my five minutes.

The first point I wanted to make was that in
looking at Unilateral Effects, I share Larry's concern about
screens. In particular, I think I agree with Mike about the
35-percent screen for Unilateral Effects. I don't think
there's any economic foundation for that screen, and it's
very easy to imagine mergers which would have substantial
unilateral effects which would nevertheless fall by way if
that screen were taken to be a serious one, so I'm hoping
that that screen will disappear in the revision of the
The main point I wanted to talk about was market definition and how it relates to unilateral effects. Market definition works fairly well in very traditional, homogenous-goods markets, but it's probably most important in markets with differentiated products. And there I think we need to realize and account for the fact that there's a very close link between market definition and analysis of competitive effects.

The way I like to think about it is just to imagine you're looking at a merger between two firms, A and B, and typically if you're going to do a market-definition analysis, whether you're using critical loss or some other -- or more traditional, classic guidelines, a SSNIP test, you're going to be basic focusing on how close A and B are to each other. Basically if you're in a Bertrand world, assuming very little if any competitive response from any of the firms in the market, so this would sort of rule out the case Joe was raising before, you will go through the usual series of steps to analyze a market. If you're doing a competitive-effects analysis, you're really just adding something to that. You're adding an analysis, a more serious analysis of the competitive, strategic response of other firms in the market. You're considering repositioning and entry, and so on.
Now in many mergers of course those additional analyses are going to be very significant, but then there are going to be some cases where the two are going to be very similar. And my concern is that sometimes the effort to literally follow the Guidelines or market definition will end up distracting you from focusing on the important points about competitive effects.

I personally have seen a number of cases, both when I was with the Justice Department and since I've left, where the merger might be a merger where there are four firms in the market and A is acquiring D, and so the market's going to have A, B, and C instead of A, B, C, and D, and you want to know whether the removal of that one firm in the market will necessarily have a competitive effect. It may be very hard to define a relevant market in that case because it may be that the exercise of going through the SSNIP test just is not one that has a clear answer. You just don't have enough track record historically or the market is very dynamic. But it may be very clear that the removal of D as a competitor would have a significant competitive effect because of D's particular nature, because it's been a maverick like firm, or whatever.

My view would be in those cases where you don't have solid evidence of exactly where to draw the line on the market, but you have very clear, strong evidence of
competitive effects, that the Guidelines ought to reflect the fact that it's okay in selected cases to do the competitive-effects analysis and, to keep my lawyer colleagues on the panel happy, you can back out the market definition that's consistent with your competitive-effects analysis. You would just, in a sense, reverse the order in which you think about the process.

Once you're done, the market you define will be entirely consistent with competitive effects, and I've seen that happen in many cases. I don't see any problem with it if it's done carefully. I think it would avoid, I wouldn't say the embarrassment, but the difficulty of having a battle about a market definition whose answer really doesn't matter for purposes of the analysis of competitive effects.

Now the second point I wanted to make quickly is that I'm hoping the Guidelines, when revised, will reflect the fact that we're in a more complex world and there are certain dimensions of that complexity which make market definition difficult. We have a lot to learn from economics. I don't think the Guidelines can spell out the right formulas, I don't think we know enough, but it could certainly reflect the importance of that complexity.

What I have in mind specifically are cases that arise usually where two or more products are complementary. When they're complementary, the analysis of competitive
effects may differ depending on whether the complements are always sold as a bundle or whether they can be or are sometimes sold separately in a marketplace. That distinction would be very important.

An example of that might be some of the after-markets cases which we've seen where there's obviously a significant issue as to whether the product being manufactured is complementary to some of the after-market services, should you look at that as a single product or should you focus on separate markets.

Another example which is becoming more important are two-sided markets, where you have examples of two different kinds of firms whose services are fundamental to the functioning of the market. If you were to take a look at market definition, looking at only one side of the market, you would almost certainly get the wrong market definition, you'd probably get a view of the demand elasticity that's lower than it really ought to be once you reflect the fact that there is a two-sided response.

I don't have a specific suggestion about exactly how to do that analysis. I think we're still moving up the learning curve, but I think the Guidelines should reflect that important complication.

Also related but moving it to the innovation area, there are lots of instances where R & D and its effect on
innovation can be analyzed in a merger by accounting for the fact that the R & D of the two firms may or may not be complementary. I think if they're complementary, there may be certain benefits associated with the acquisition, but if they tend not to be complementary, there may be certain duplication. Either way the analysis of the merger should reflect the nature of a complementarity of the R & D of the merging firms.

Now let me just take one more minute to try to get back to Joe's question about unilateral and competitive effects. It strikes me just as an aside that it wouldn't be a bad idea, which I assume you're doing already, to follow the debate over the merger guidelines in the EU, which is still continuing as far as I can tell, and the EU has taken a slightly different position on these issues. I think it actually goes to Joe's question. Because, at least as I read it, the EU guidelines, as I last read them, don't describe the term unilateral effects, they called them "noncoordinated effects." They say unilateral effects can arise when a merger creates or strengthens the dominant position of a single firm. Whereas the U.S. Guidelines tend to talk about lessening of competition as it arises for unilateral effects.

Now I may be wrong, as I read that, if we were to take, say, a simple model where we have some kind of
Stackelberg leader responding strategically to the possibility that the other firms in the market will respond to its behavior and the other firms responding accordingly, the EU would say that's a noncoordinated effect. Whereas in the US, I think the sort of Stackelberg kind of case we would almost think of as outside and we'd probably put it in a coordinated area.

So I'm not a big fan of necessarily coordinating that, following exactly what the EU does, unless they happen to be right. But it might be useful to try to think about whether some convergence on the language here is beneficial.

Thanks.

MR. FARRELL: Thank you, Dan

Dan Wall.

MR. WALL: Thank you and good afternoon. And I also appreciate this opportunity to participate in the workshop. I appreciate somewhat less having to follow these three with my opening statement, but many of the great ideas I had are now gone and made.

The subject of this panel, Unilateral Effects, is certainly one that's near to my heart because practicing here in and around Silicon Valley, virtually every merger that we see ends up being one that is assessed by a unilateral effects paradigm rather than a concerted action or coordinated effects paradigm. It's a doctrine that's far
more important to the companies in the Valley than coordinated effects analysis is ever going to be.

Of course as was mentioned, I also litigated along with a few people that are in the room here, one of the principal cases, which is the DOJ's challenge to the Oracle-PeopleSoft deal.

I want to make four points in my opening. The first is that I definitely fully support the process of making revisions to the Merger Guidelines generally and to the Unilateral Effects section specifically.

It's interesting, the 12 years that have passed since the Merger Guidelines were last revised, happens in the case of unilateral effects to encompass a very large percentage of the time that the doctrine has existed. It is certainly a period of time in which a lot has happened, as Mike was referring to earlier, and I do think that there is uncertainty out in the world about how much of that has made its way into the mainstream enforcement practice, how much is relevant largely just in the economic literature as background. Addressing that, I think would be great.

An example I will give is that the unilateral effects analysis most pertinent to the Oracle case is referenced at best in footnote 21 of the Guideline in a brief paragraph in Section 2.212 regarding markets where it's costly for buyers to evaluate product quality. The
entirety of that can't be more than 60, 70, 80 words. And it is not terribly illuminating about how to conduct that particular kind of analysis, which deals largely with markets in which there are auction like conditions.

I can also say that on more than one occasion I've tried to make arguments to the Agencies based on concepts from the Unilateral Effects section of the Guidelines, only to be told that I was wrongly referencing the standard-differentiated products case, not some more nuanced version of unilateral effects analysis that was appropriate for that case. I think it would be fair if we had a somewhat more comprehensive treatment. I realize that there will be diminishing returns at some point to that because we get a lot of very unusual situations, but it would be good for all if the revised Guidelines were more comprehensive in the kinds of unilateral effects scenarios that the Agencies are concerned with.

Second, and harkening back to something that was said earlier, I think that revised guidelines need to decouple the discussion of unilateral effects from the coordinated effects discussion more than they do now.

To me the Unilateral Effects standards in the Guidelines are a kind of antitrust centaur in which you have the head of a unilateral effects analysis that has been grafted onto the body of a coordinated effects analysis.
And what I mean by that is that the foundational market concentration discussion in Section 1 of the Guidelines seems to have been written on the foundation of Philadelphia National Bank and its antecedents and how coordination is more likely in concentrated industries.

The discussion of coordinated effects seems to follow fairly natural from that foundation, but when you get to Section 2.12, the Unilateral Effects section, I would argue that it does not. It's somewhat of an awkward fit with a poorly-articulated and, I would say, poorly-reasoned statement that where market concentration data fall outside the safe harbor regions of Section 1.5 and the merging firms have a combined share of 35 percentage, a presumption of a unilateral effect or, more specifically, that a substantial number of customers view the merging parties as their top choices is appropriate.

As has been mentioned, it's not clear why that exists. It's not clear where the numbers came from. It's not clear why one would graft the unilateral effects head onto that body, and I think it would be better for all that the Agencies sort of rework that.

I fully appreciate that there are positives and negatives of going down that path. I would say the big negative is that it would confirm, at least to me, something which I have maintained for some time, which is that the
Philadelphia National Bank presumption ought not apply to unilateral effects cases.

As an historical matter, it rests on economic work that was cited by the court and argued in the parties' briefs in that case, about the propensity of concentrated industries towards collusion. It was also developed at a time when, to be fair, the only unilateral effects case that anyone had ever heard about was the occasional merger to monopoly. It is woefully incomplete as a basis for inferring a unilateral effect. And, in candor, I think its only utility in these cases is that the Government likes to cite it in litigation for the tactical advantages that that creates.

I don't think that that value is sufficient to allow it to confuse unilateral effects analysis. I would prefer the Agencies to say that in differentiated products cases or some other natural fork in the road where you would tend to go in the direction of unilateral effects case, you look at market structure, which certainly you would need to do in one way, and articulate what those standards may be.

The third point I want to make echoes what Larry said and that is that I think that any revised Unilateral Effects Guidelines needs to be written with due respect for the limits of Section 7 of the Clayton Act and with an appreciation that unilateral effects models that are present
in the literature can condemn mergers that may not have the
proscribed effect for one substantially lessening
competition in a line of commerce.

My major concern with unilateral effects analysis
generally has always been that it can be used to condemn
mergers based upon their effects on groups of customers
within a market, even though the market is not affected
generally.

Oracle is a perfect case in point. In that case,
one of the Government's experts testified based upon auction
theory that about 20 percent of the customers in the
relevant market, constituting those who viewed Oracle and
PeopleSoft as their best substitutes, would experience a
postmerger price increase, the other 80 percent would not.
They would not suffer a price increase because someone other
than the merging parties was one of their two best options.
And under the same auction theory, that prevents the adverse
effect from occurring.

Well, without arguing whether that's true or not,
I would question whether on its face an adverse effect of 20
percent of the customers in a relevant market satisfies the
Section 7 requirement of substantially lessening competition
in a line of commerce. We briefed in that case not
specifically to this example but in general that it would
not. Just because I can't resist, I would note that at the
top of every one of those briefs is the name Tom Rosch.

(Laughter.)

MR. WALL: Now there isn't a great deal of law on this, but what there is suggests that substantiality is in relation to the market as a whole and that the market must be generally affected or at least a sizable portion of the market approaching or exceeding a majority. Obviously not everyone needs to be at risk, but I question whether effects in discrete corners of the market really suffice under the law.

I've seen economic papers postulating that significant unilateral effects could be established because firms with quite small market shares, sort of Vons Grocery kind of market shares, are particularly close substitutes. I won't claim that I'm qualified to critique the economics, but I will claim some comparative advantage in interpreting the statute. I will say that I just don't believe that a merger that was prosecuted solely under that theory and was prohibited would withstand appeal and certainly not if in my lifetime the Supreme Court takes a merger case again. Of course that's unlikely.

The statute does not proscribe mergers, the effect of which may be to create upward price pressure in pockets of a relevant market. New Guidelines, I submit, need to respect that.
Fourth, and finally, I strongly urge you to approach the new Guidelines with an appropriate sense of the limits of economic models to predict future price increase. Unilateral effects analysis has been a particularly fertile area for innovations in antitrust economics and particularly for those who assert modeling and simulations can be used as primary means of meeting the Government's burden of proof.

To my knowledge, however, there is very little in the way of empirical proof that ex ante predictions of increased prices pursuant to these models have been validated ex post. I can certainly say that the predictions of the Government's auction theorist in the Oracle case who said that at least 20 percent of the customers would experience nearly 100-percent increases in prices as a result of the merger, which of course was consummated, they were completely wrong. Prices have not increased to any meaningful degree, let alone to that predicted amount. So I worry a lot that new Guidelines will over emphasize these intriguing but fundamentally unproven tools.

Sometimes the qualitative analysis simply works better. Personally I think the most important part of unilateral effects analysis is focusing on repositioning, a subject that gets no more than a couple of sentences in the existing Guidelines.

Evidence of historical tendencies to respect
competition from the merger partner more than from others is also very important in making out the case.

I appreciate the desire to develop and implement these new econometric methods of proof, but respectfully I would question whether those methods are ready to take a prominent role in new Guidelines.

So thank you very much and I look forward to answering questions.

MR. FARRELL: Thank you.

So let me come back to the question that I started out with about the gray area or dividing line, whichever it is, between unilateral effects and coordinated effects. I think I heard Dan Rubinfeld say that at least according to the EC guidelines you think Stackelberg oligopoly would be viewed as an unilateral effects model.

And Dan Wall, I think you expressed some view on where the dividing line might be, but I wasn't quick enough to write it down. Can you refresh us on that?

MR. WALL: Well, this is an interesting case in point about the interrelationship between statute and analysis and Guidelines and how they articulate things. I think that the EU has that verbiage difference having the noncoordinated and coordinated because of the statutory basis for prohibiting mergers in Europe, which as an alternative to a coordination theory needs to have some
dominance element. They just need to check the dominance box. So they tend to approach it that way.

Coordinated effects to me is generally thought of as a straightforward, tacit-collusion kind of theory.

MR. FARRELL: So the gray area that I talked about, you would regard assuming it to exist as unilateral?

MR. WALL: I would put it in unilateral because, as we say, the taxonomy that we have, it gives me the only other choice as unilateral, yes.

MR. McFALLS: I'm not sure I understand what the practical import would be in the Guidelines or in practice, because take the example of RJR/Brown & Williamson. The Commission investigated under both unilateral and coordination hypotheses. If the theory is, well, you're not going to have coordination the way you might have with milk and cement in differentiated product markets, that's true. You can investigate that as a coordination hypothesis anyway.

If it's, well, the parties we've shown are going to have a unilateral price increase and now we're just quantifying how much other companies are going to raise prices, I mean I think you've already got the violation through a unilateral price increase, so I'm just trying to understand.

One aside about the UPP and similar measures.
Part of the problem I think that a lot of lawyers may have with it is the sense that when you look at gross margins, and they assume such a significant portion of the analytics, certain inferences arise about the competitiveness of businesses with large gross margins that are not consistent with a lot of people's, at least, intuitive experiences with businesses.

So if you look at shampoo, for instance, Proctor and Gamble has a significant gross margin in the shampoo market, but how many of us can really say that Proctor and Gamble isn't really using advertising, which is generally categorized as a fixed cost, to compete effectively. It's essentially the flipside of price to Proctor and Gamble, so it's a variable of competition.

There are a lot of businesses with gross margin -- I'm putting aside all of the software businesses out here that are competitive -- and that it doesn't really tell us a lot about the competitiveness of those businesses. So that's just a general aside.

MR. FARRELL: I'm mostly here to ask questions, but I will answer that one. I mean the issue in a merger is not is the industry competitive and it's not does this firm face competition. It's what's the impact of the change --

MR. McFALLS: Sure.

MR. FARRELL: -- here to this merger and in
certain circumstances it turns out that the answer to that is going to be related to gross margins. It doesn't have to be filtered through some perception that high-gross margins are an indicator that there's no competition out there, although people sometimes talk in that way.

MR. WALL: But it's not just what happens in the abstract. It's whether competition is lessened substantially. That's the only statutory language we have to go off of. And if an effect, upper price pressure, what-have-you, that cannot directly be traced to the loss of rivalry, the loss of intensity of competition, what-have-you, shouldn't count as a legal matter under the statute.

MR. FARRELL: Well, I think there must be legal questions that many lawyers could spend a lot of time on there if you're going to raise the possibility that an effect that is due to the cessation of rivalry between two horizontal competitors might not be due to the loss of competition. But I'm probably not the right person to pose the pointed questions here.

Dan.

PROFESSOR RUBINFELD: Well, I was just going to say maybe I'm wearing my law professor's hat now, but for me it's nice to know the narrow definition of coordinated effects. We have pretty strong case law and there's a certain avenue that the Agencies can go through and have
with some success. If we start defining that space to
broadly include what I think is more something that's more
like unilateral effects, which is more elusive, I think
we're actually losing some of the sharpness we have from
pursuing these sort of traditional coordination cases.

I was just going to mention in passing, Mike
mentioned RJR/Brown & Williamson, I happened to be the
outside expert for the FTC in that matter, and I can't
reveal everything I did. But I'd just say I don't think I
have any trouble distinguishing between what I thought of as
a traditional coordinated view of that market and unilateral
effects view, and I thought I looked at both when I was
developing my opinion on the case.

So I know the line between unilateral and
coordinated is fuzzy, but I would be uncomfortable actually
if you were to broaden that very far because I think you
would hurt some of the clear presumptions we have, in those
few cases that Dan Wall sees that are coordinated.

MR. McFALLS: I'm sure they exist.

MR. FARRELL: Larry.

MR. McFALLS: One other impact that arises, and
RJR is an example and Miller/Coors is another, Heinz Baby
Foods is quite another. When you apply a lot of the models
and UPP, and we found this in another pharmaceutical case,
what you end up having as a possibility is a presumption
against mergers, of course as Dan said, small market-share firms that would like to compete more significantly against larger firms.

A lot of the larger firms are must-have products. So you're not going to get a lot of diversion to them. So ironically you have these cases where it's really the second and third firm combinations that raised the most issues. It makes sense intuitively because that is the most competition that could be lost in the market because that's where the locus of competition is. Understand that longer-term competitive dynamics, and I think the Commission saw that on RJR, baby food, and maybe Miller/Coors, it's really good to have a strong number two on these plays. And you may not have as much flexibility as a prosecutor doing that if you apply the models in a mechanical fashion. Nobody's proposing that you do, but I think that could be lost.

MR. FARRELL: Yes. I mean nobody is proposing applying these models in a purely mechanical fashion or making them the sole touchstone. I mean that's --

MR. McFALLS: With that said, the UPP I have seen applied at the end of an investigation, not at the beginning. After you've gone through the trouble of producing documents, for months, having it come back to you as a presumption at the end of an investigation is a little unsettling. I mean it's something that can be managed
ultimately. If parties disagree with it, they always have the theoretical option of litigating.

MR. FARRELL: Let me use that as a segue into my second question for the panel, which is: In the end a litigated case inevitably is going to be about everything. Pretty much everything is going to be worth bringing up for one side or the other, and in many cases both.

And it's got to be a story and it's got to involve every motive analysis pretty much that you can think of. But in terms of dealing with the thousands of mergers a year, almost all of which are never litigated, what's the right way to diagnose relatively quickly which ones to pay more attention to, to worry about more, to go the next step or the next step after that.

So I have a little list here which I think I emailed to you gentlemen of four things that have been proposed as handy diagnostics, the Herfindahl, the change in the Herfindahl, some sort of measure of upward pricing pressure, and the number of firms.

And I will say that my own staff in describing mergers to me, when they tell me what's happening with some new merger that's coming across the transom, they very often use the N measure. They say it's a four-to-three.

And I say, oh, is that the right diagnostic?

And they get a little sheepish. But it is
actually used widely in practice inside the Agencies.

So do you have thoughts about if one's going to use, and I think it's inevitable that we have to use, given the number of mergers we deal with, even in a merger trough, if you're going to use some relatively simple measure that says, yes, every horizontal measure in some sense eliminates some rivalry, but some of them a lot and some of them a little, and how do you measure that?

How should one use some combination of these four or other things?

And, follow-up question, when you've done that, since it's not the end of the story, by any means, what's the best thing to do next, what's the immediate comeback that might save a lot of trouble if you look at it quickly rather than plunging into some big next step?

PROFESSOR SHAPIRO: Joe, you add the sum of the share in the merging firm.

MR. FARRELL: The sum of the shares of the merging firms, I'll add that --

PROFESSOR SHAPIRO: -- as to the market.

MR. FARRELL: Although the product of the shares of the merging firms was already in there as the delta.

PROFESSOR SHAPIRO: I believe the sum and the product are the same.

MR. McFALLS: Is the log useful?
(Laughter.)

MR. FARRELL: The log is useful. I was thinking of a tactful way to say that.

Thoughts?

MR. McFALLS: I mean as a practical matter, we know when people, when our clients are likely to have issues right away, and I think we use all these. What should you use as a safe harbor, aside from the phone calls that you're going to get from customers who are competitors, I see no problem in applying all these tools. Assuming that you have the data, these are done in the course of a day, so I don't think you're really saving any time.

What's the most meaningful? Again none of these are particularly meaningful at the end of the day, but if you're going to use UPP, in the limited circumstances that you've identified it makes sense to use this. It's clearly an improvement over the arbitrary method of going through market definition, but you have to realize that that's where you're going to back into it.

As Dan said, at the end of the day, because you're going to have all of these other sources of information that you're going to use to back into it. If you used it as a screen, you probably ought to modify it to reflect the fact that you're not going to catch mergers that were fine under the previous screen. And there are any variety of ways that
you can modify the UPP to make sure that you're not catching
mergers that, you know, were fine under the old screen,
unless you are able to do a respective showing that those
mergers weren’t fine.

MR. FARRELL: I will note that of course we don't
do nearly that many retrospectives, we should but we don't
have the staff, but those retrospectives that have been done
are not very consistent with the idea that mergers that are
allowed to proceed are harmless.

MR. McFALLS: I'm not saying the mergers that are
allowed to proceed are harmless. I'm just saying are you
catching mergers that were fine under the HHI screens as
problematic under UPP. Soft drink mergers, from what I
remember, a Harold Saltzman study in the late nineties
showed some of that. But I think that's worth revisiting.

I don't think there is any problem or harm in
using these screens. And there could be harm to the
Agencies over time if you're expected to do this in every
case.

PROFESSOR RUBINFELD: I have a couple of comments.
First on the comedic side, I hope whenever I hear four-to-
three, three-to-two, I can't get a certain jingle out of my
mind. So I think: Four-to-three, that could be; three-to-
two, that won't do. So that matters to me.

On a more serious note, I do think that some
screening process is important because the costs of second requests and mergers are now so high that the Agencies have to find a way to screen. And when I left the Justice Department, I got very interested in some of the more complicated simulation methods, which you had to have at least a second or a third request before you could finish. So I devised, as some of you know, some software which is a logit like variant that does a quick-and-dirty analysis of simulation. And it's actually very similar in spirit, I would say, to the UPP idea that Carl and Joe developed, trying to use some simple rules of thumb that will get you a ballpark estimate of what's going on.

I do actually, though, agree basically with what Dan Wall said, and that is we don't have very much evidence as to how accurately these models predict. I like to use them not so much as predictors but as sort of ways to evaluate robustness of results.

In the simulation model I like to use, I actually modeled repositioning and entry along with the initial estimate of competitive effects. These are all relatively easy to do if you make some pretty strong assumptions.

In the end I like that device but not because it tells me the merger's going to cause prices to go up by 6.7 percent, because I don't really know that, but it will tell me exactly what to look at and it will tell me how strong
certain arguments have to be before I'm going to clear the merger. I think qualitatively those methods are very powerful.

MR. FARRELL: Harry.

MR. POPOFSKY: Well, I guess I will try to get a word in modestly edgewise. I have never argued with the good professor on my right, so I won't do so now, given his wealth of experience. But I remain skeptical that you have reliable-enough data or can get it without going into, as you said, a second and a third request to really come up with anything like a meaningful assessment of whether the merger will substantially harm competition.

And I, for the life of me, do not yet know whether simple screens in the sense of a revised HHI, for example, if used would not pick up virtually all of the dangerous mergers that one could identify with the refined models which you speak of.

I know the HHIs need revision. I think there's very little doubt that they have to be changed to reflect much more of the actual practice and much more of the actual risks to the economy from mergers, but until there is some reason to believe that traditional HHI type of analysis, and it's certainly more refined than four-to-three, but more refined HHI analysis catches the bulk of that which puts the economy at risk, I'm not sure internally one needs a great
deal more.

There is an enormous advantage that the administration has over private parties in the administrative process, and one can never ever look beyond that. The cost advantage is immense. The fact is that the transactions will fall apart if challenged, sometimes even if there's a second request. And it seems to me that if one can still use, maybe I'm a Neanderthal, something closer to the historic concentration in HHIs, to make that first cut before one goes into the more elaborate modeling, then you've done what the public interest fairly requires. I don't think the fallout is that great. I don't think we'd be missing a significant number of dangerous mergers.

MR. FARRELL: Can I just follow up? You mentioned, you said modified or refined Herfindahls. Are you talking about a change in the measure or are you referring to changes the thresholds that are, for example, described in the Guidelines?

MR. POPOFSKY: I was assuming that the thresholds were the main thing. I'm not enough of an expert to work with the measure itself. I was taking the measure as-is, but the threshold seemed to me plainly out of whack.

MR. WALL: So a couple comments. First of all, to answer the question about screening inclusion, exclusion
criteria, I would tend to start by looking for a measure of the number of firms, because I think in the unilateral-effects analysis a small number of firms is going to be usually a fairly important part of it. And, I like actually what Carl suggested, they're very simple of what the combined share is.

I started practicing antitrust in 1980, so I was in the first generation of people who had to learn how to square market share numbers, and I still don't know why we do it. I still don't understand what the utility is. If there were a paperwork reduction act for antitrust, just not having to square the numbers would be a good way to --

MR. FARRELL: It's because if you add up the shares without squaring them first, you always get the same answer.

MR. WALL: Okay. I would start with the number of competitors and some sense of combined share.

I would proceed to ask what are the indications that you have particularly close competitors.

Then in terms of the exclusion criteria, if you will, what I would proceed to immediately is focusing on repositioning, as I indicated earlier, because I think in practice that's very often what makes a unilateral effects story fall apart. It is easier to establish repositioning than it is to meet the entry standards from just, if for no
other reason, that the person who's already in the market has gotten certain assets that just need to be redeployed.

In a lot of the cases that I've been involved with where we haven't gotten a second request or we've got it through with Quick Look, or something like that, one of the reasons is because an advantage from our side of the table of unilateral effects analysis is if you can establish quickly that either you're not particularly close substitutes or that there's other people who could move around pretty quickly, you have a good chance of just getting out of jail right away, and we had quite good experience with that in a number of cases. So generally that's how I would approach it.

MR. FARRELL: So several of these suggestions, including some of the ones that I raised, require you to define a market before you can implement a screen or index, or whatever you want to call it. In talking, Larry for example, about how the Herfindahls might be a good way to go, to the extent possible, what style of market definition do you have in mind? Do you have in mind the market definition as in the '92 Guidelines? Are you talking about a more intuitive market definition? What do you have in mind?

MR. POPOFSKY: Well, I think what I had in mind, for purposes of this initial, internal, 'I've got a thousand
mergers, how do I deal with it,' was an intuitive market
definition. Every practitioner, it seems to me, sits down
with the client and asks: Who are your competitors. What
are the practical alternatives your customers have. Where
can they go to get product. You can construct an intuitive
market pretty easily from those conversations.

MR. FARRELL: And so can someone else.

MR. POPOFSKY: And so can someone else. I'm not
saying it's definitive, but I believe that you get a very
good, quick grasp on what becomes a market definition. You
can very quickly, whether you do it by just concentration
ratios, percentages, whether you do it by HHIs, you can get
a very quick handle on whether the merger seems to be
potentially risky before you ask, okay, what are the
unilateral effect risks here. Are they distinctive.

PROFESSOR RUBINFELD: And let me --

MR. POPOFSKY: I think in an oligopoly, my own
view is it's very hard to say what is unilateral and what is
coordinated. It seems to me you end up saying almost the
same thing in different guises.

Anyway, my view is: This is not that difficult.

PROFESSOR RUBINFELD: I was just going to repeat
something I said earlier because I think it's important
here. In many cases there's not going to be much issue
about what the market definition is, in which case I'm
comfortable with a sum of the shares, probably as well, although I can square probably better than you can, Dan.

MR. WALL: A calculator, yes.

PROFESSOR RUBINFE LD: Yes, I have a secret calculator.

But there are a number of other instances where the market definition debate starts to trump everything and can lead to some perverse discussions and often second requests that I think would be unnecessary.

An example that comes up a lot in my thinking is in a lot of pharma cases one side of the issue will typically like to define a market as the molecule, or even narrower than that, and the other side will typically define the market as every possible drug that might have some therapeutic value. Now what's the right answer? Well, it's just going to vary case by case, and sometimes we'll be able to sort that out. Other times it's going to be very difficult because it's a highly innovative, evolutionary market.

But I've seen many cases where the effect of the merger really didn't matter on where you drew that line. So the advantage of some of the simulation methods or the UPP concept, or all of that, is that it builds on focusing on diversion and the impact of diversion and it doesn't build directly on a narrow definition of a market.
I think we ought to just allow ourselves, I hope in the revision of the Guidelines, the flexibility in those cases to go that route. Most of the time it won't be necessary, but when it is I think it'll save a lot of trouble. Sometimes it'll make it easier to prosecute a case, but a lot of other times it'll avoid a lot of cost for the parties that are doing a merger.

MR. WALL: Some of you know what's coming because I've made this speech many times before. There is a practical side of all of this which is it would be great if when the Agencies brought a merger challenge, they were to prevail in court. And they are never going to prevail without either giving market definition the primacy and respect that it has under the case law or undertaking a long and what I would predict would be difficult process of reeducating the courts to move away from market definition and accept these backing-into-the-market methods or direct proof or direct simulations or something like that.

I personally think that I wouldn't advise path two because I think it's going to be wasteful and it's going to lead to a lot of unsuccessful cases given how embedded market definition is in the law.

When Larry said you sort of a little bit of you know when you see it at the beginning, that there's a certain intuitive way that you can kind of tell what the
market is, Larry and I have spent our careers as litigators. And one of the things that, like my mentor, Tom Rosch, that you realize right away is that that first intuition you have, based upon what seemed sensible as a market is probably the market definition that has the best chance of holding up in court, too. That it's going to be plus or minus that something. It's going to be very, very difficult to meet the burden of proof that you have if you try to establish a much smaller market than that based upon price discrimination or some backing-in methodology, or something, You are just handing the merging parties a very, very potent argument to defend the merger.

I know that there remain many people in the Agencies who remain convinced that they were right in the Oracle/PeopleSoft case. The case did not have a chance of succeeding because of market definition being so difficult to prove and establish. It was so difficult to sustain that market definition.

This is how it's going to be for a long time. And I just think the Agencies are making a fundamental mistake if, through the Guidelines or whatever, they try to go in other directions in order to wire around difficult problems of market definition.

MR. McFALLS: Just one word, Danny. I think when you say --
MR. POPOFSKY: I just want to say I like that speech, however many times he's given it. And the only thing I would add is I have a sliderule for him for his mathematics.

(Laughter.)

MR. WALL: I have an abacus.

MR. McFALLS: Yeah. The only thing I'd say is the backing-in process is not a model. It's just a process that you go through as you're finding of facts. At the end of the day you're going to have to make a decision about what relevant market you think is correct.

All that said, does it really matter. If you're going through the process of finding out what the diversion ratios are with UPP, you're identifying who the competitors are, unless of course you only have one diversion ratio and it's from one merging party to another.

I mean if you find out what the diversion ratio is with the other players, you are figuring out who else constrains the parties. And I've got news, there are a lot of defense lawyers who might like this approach because you might find out there are a lot of people who use soap as a substitute for shampoo or shower gel as a substitute for shampoo. So at some point you're going to have fights down the road about what a diversion ratio should actually mean in this context and whether or not any of this matters.
MR. FARRELL: Okay. Let me turn to questions from
the audience. Tom.

PROFESSOR SHAPIRO: I believe it's on.

COMMISSIONER ROSCH: Thank you. Well, frankly, I
kind of come out a little bit in the middle because I do
think that there's a lot of the substantiality in our
statute. I think it does speak in terms of substantially
lessening competition. That makes market definition and I
think probably the product of the merging parties' shares,
Carl, the more relevant measure.

And I think it needs to be relatively high. But I
don't think it needs to be an upfront market definition. I
think it's one factor to be taken into account. And that,
frankly, is why I am inclined to think we can use the same
tests for unilateral effects that we use for coordinated
effects.

As I remarked at the very beginning this morning,
this is not a brand new idea. This is Professor Whinston's
idea. He suggested that basically what we're doing with
Section 1 of the Guidelines is that we are defining demand
elasticity, basically, or a demand curve, if you will.
We're identifying those -- a diversion ratio, Michael, if
you want to talk about it in that respect.

We're talking about what sellers think is going to
happen if they raise price appreciably, who are their
competitors, and what are their market shares. Basically that's what we're talking about.

Now where I depart from you, Dan, is that to my way of thinking when we're talking about unilateral effects analysis, if we literally follow your paradigm, as I understand it, if you have second and third firms whose market shares represents ten percent apiece, but they divert very substantially one from the other and back forth. That's a problematic merger under the unilateral effects theory. I don't think that should be the law. I agree with the notion that you put out earlier, that substantiality means something under our statute.

So I think that basically what has to happen is you need to demonstrate, the Agencies need to demonstrate as one of the factors, not the only factor, not the upfront factor, but one of the factors they need to demonstrate is that it's a, say, 40 percent at least, the sum of the merging firms, the sum of the shares of the merging firms. I would have no problem in making that a factor. And that would be a screening device of the sort that you're talking about, Larry, that would screen out the unproblematic mergers and we wouldn't have to worry about those in the hundred that we review.

But I resist the notion that we need to have that as an automatic, upfront screening device in every case. I
don't think that that's the case. That's one very important factor, but not the only one.

MR. POPOFSKY: If I could just comment, and it relates a little bit to what Dan said, if you do the anticompetitive effects analysis and back into a market definition that way and if in fact that's the market definition that corresponds with what you learn when you talk to your clients, and they say who are your major competitors, you end up in the same place for presentation to the court. You then have a market definition you can put upfront to the court and say: This isn't just some esoteric, jerry-built, strange language, Oracle-style market, this is a real market, even if it is more narrow than people generally tend to think about it.

The problem is the perceived sense that courts are reluctant to accept narrow markets. If you back into the market definition, it seems to me you have potentially a defensible, upfront market definition you can go to court with, but it ought to come to the same thing. It should make no difference whether you do it one way or the other. You've got to have a meaningful market definition.

And I, for one, believe that a percentage screen is awfully useful, just like it is in Section 2 jurisprudence, where we're also dealing with monopoly power or abuse of dominance. There's no reason why Section 7 has
to be so completely divorced from Section 2. Both deal with unknowns. One is what will happen tomorrow if they merge; the other is what would happen if we didn't have this conduct we allege to be anticompetitive. Both deal with unknowns and both deal with attributes of alleged dominance.

And I think if things like 30-percent screens work for tie-ins, exclusive dealing, they ought to be equally utilitarian in merger analysis.

MR. WALL: So one comment is that one of my reactions to this notion of backing into the market definition is a very practical one, is that when I see it proposed, it more often than not ends up resulting in a market that is narrower than that intuitive one that you see. After a while, as creeped out as I am by the idea of using body wash on your hair, I don't see that happen quite as often as I see a market that it's got to have at least these five players, now only has these three, because we backed into the market.

I can back into a conclusion from that, which is the utility of this method is primarily to narrow markets. Again, not to be repetitive, but I just say that when you do that and then you try to go to court, you've got one hand tied behind your back because you have handed the merging parties the argument of: Hey, where is the other two guys that walk, talk, and quack like competitors. And to say,
well, yes, I mean the documents say they compete and the
parties say they compete, but I backed into the conclusion
that they didn't compete is unlikely to be effective.

PROFESSOR RUBINFELD: I was just going to say, so
Dan can sleep better tonight, the cases I have in my mind
are exactly the opposite where looking at some of the
historical data empirically has suggested to me some
relationships, certain degrees of substitution that I hadn't
thought about. I can think of a couple cases where when I
would talk to the parties, they would say: Yes, that's not
in our upfront documents, but now that you mention it there
is substitution.

One classic example had to do with the merger of
cereals. Some of you know I was involved with it long time
ago and I found empirical evidence that the cereals that
kids eat substitutes for the cereals that adults eat. And
that led to a broader market and to me actually testifying
that adults were once kids. So you never know what will
happen when you back into market definition.

MR. ZONA: There's a fundamental tension between a
SSNIP-defined market, it seems to me, which tend to be
narrower, as I look at them, and the markets that get
accepted by the courts, with the exception of Whole Foods, I
suppose, the District Court might get it right. So it seems
like all of you have sort of addressed this point in a way,
but should that be addressed in the Merger Guidelines, in any revisions to the Merger Guidelines?

MR. McFALLS: I've got one comment to make. I think somebody in the comments to the request for comments pointed this out. It's pretty obvious that the SSNIP test presumes that the merging parties -- the hypothetical monopolist test is that you could impose a unilateral price increase of x percent, five to ten percent. Obviously if you've reached that conclusion and the merging parties are a monopolist and there would be a unilateral effect, so in that sense you've already answered the question for price increases at least that are five percent and above in the market definition.

So theoretically, the Unilateral Effects Section in the differentiated-product market context should only cover mergers that result in a zero- to five-percent price increase. At some point it might be nice to iron that inconsistency.

COMMISSIONER ROSCH: One last comment. Dan, I recognize there's a substantial body of case law out there that does require an upfront market definition. By and large, those are older cases. However, Baker Hughes was exactly the opposite. It suggested that what was really the real inquiry in these cases should be competitive effects.

So I'm not quite as dour about the Agencies'
chances in these cases as you are if we eschew an upfront market definition and simply treat it as an important consideration but just one of a number of them.

PROFESSOR SHAPIRO: I would also just jump in there. The upfront, it's one thing to say if we went to court that we would tell the court in the complaint: Here's the relevant market, here's the line of commerce, that's where we claim there's an effect. That's very different than saying the first step in a merger investigation, either before or after a second request, is going to be to figure out what the relevant market is in order to figure out effects. Very different.

MR. WALL: I agree with that completely. Behind the closed doors of the Commission you obviously can do it in whatever order you want. It is just that if the end product of that is a conclusion that then has to be articulated by reference to a traditional market definition to go get an injunction, have that in the planning cycle somewhere.

PROFESSOR SHAPIRO: Thanks for the tip.

(Laughter.)

MR. FARRELL: Any of the panelists want to issue a very brief closing?

MR. POPOFSKY: Well, I was just struck by one thing that Commissioner Rosch mentioned, because I come from
an era before there was such a thing as a unilateral effect.

It wasn't in Areda when I was a student. If it wasn't --

MR. WALL: They actually existed, we just didn't

know what to call them.

MR. POPOFSKY: Well, they didn't exist. If it

wasn't in Areda, that was the truth.

After all is said in done it is not clear to me

that we have moved a great deal forward dividing the world

into two halves. I mean your opening question suggesting

there's a very large gray middle ground suggests the same

point, that perhaps, just perhaps a unitary look at the

market as a whole, concentration ratios however you want to

do them, suffices to catch all the potential anticompetitive

effects, and that the Guidelines ought to reflect that and

come at it that way, but then identify the potential kinds,

kinds of anticompetitive effects that can occur, whether

they're called coordination, whether they're called

unilateral, whether they're called something in between.

I guess I'm not persuaded, as I reach antiquity,

that Areda had it wrong in 1962.

MR. FARRELL: Thank you very much.

(Applause.)

MR. FARRELL: Let's take a 15-minute break and

start again at 3:43

(Recess taken from 3:28 p.m. to 3:49 p.m.)
PROFESSOR SHAPIRO: If everybody would sit down, let's get started for our last panel here today. Thank you all for sticking around with us.

For this final panel, I'm actually particularly enthusiastic and excited about it for two reasons at least. One is we have some actual folks from real companies as opposed to just the academics and the practitioners who are not inhouse. So I'm hoping we will use this to get a little more sense of how the whole merger-review process and indeed mergers and acquisitions fit into
the some of the strategies of at least three companies that
are important in the tech sector.

The second is the topic. So the topic is:
Dynamic Markets and Innovation. And it's not a coincidence
that we decided to hold this panel here in Silicon Valley at
Stanford. That has sort of obvious reasons. Of the five
workshops and I guess some 20 panels total we're having over
these two months, is this the one devoted to this topic. So
that seems to be terribly important.

Let me just introduce the members of the panel in
the order actually I will ask them to speak, just with brief
introductions. First in the middle here, more or less:
Mark Chandler, who is the Senior Vice President and General
Counsel at Cisco Systems;

Next we'll hear from Greg Sivinski, who is a
Senior Attorney and handles antitrust at Microsoft and has
extensive experience with deal-making and deals from the
Microsoft perspective;

Third will come Bruce Sewell, who's General
Counsel and Senior Vice President, Legal and Government
Affairs at Apple, who I've had the pleasure to work with
extensively over the years, before I joined the Government;

And then we will have two academics: David Teece,
my colleague and friend from the University of California
Berkeley, the Thomas Tusher Professor in Global Business;
and, lastly, Tim Bresnahan, my friend as well, Landau Professor of Technology and Economy at Stanford University. Let me set up the topic with a few minutes, as I did earlier this morning for the previous panel and Joe did for the panel we just concluded.

So innovation and dynamic markets. These are actually potentially two different topics, closely related. We have some markets where markets are changing for reasons other than innovation: Declining industries. Some firms happen to be in trouble, other firms are up and coming. So in principle we can distinguish the two. In many cases the reasons for the dynamics are innovation and technological change, so they fit together very well. But I think we can talk about market dynamics even when there's not substantial innovation. In some cases we do see those markets, so I just want to flag that distinction.

We will focus, to be sure, on innovation, though. It is striking, one might say glaring, that innovation is virtually absent from the Horizontal Merger Guidelines. There are some general nods in a couple of spots to nonprice competition and that you've heard that today, it's of interest in merger review. This can, in principle, be product quality, service, product variety, as well as product movement, R & D, innovation. But there is very little there to indicate how innovation effects would be
analyzed or how industries with substantial technological progress would be evaluated differently than more static or stable industries, let's say.

And, unfortunately unlike many other areas, the Commentary from 2006 does not provide a great deal of additional material on this either. It certainly mentions a number of cases where innovation has come up, but does not give a lot of guidance, so we're in this situation where at the same time we've got this, let's say, omission or very little that said there's a widespread recognition that innovation is king, if you will. Somebody said you look at the Guidelines, it sounds like pricing is king, but many of us have said or recognizing that it's become somewhat of a mantra, actually, that innovation is the main driver of consumer benefits of economic growth over the medium to long run, at least in a great many industries and probably the economy as a whole.

So we've got this terribly important dimension of competition that is relevant for merger analysis, but virtually nothing in the Guidelines. So that seems like an opportunity for improvement if we're going to revise the Guidelines.

I would note a particular article that I can't help but mention. One of the members of our working group, the working group of six members between the FTC and DOJ, is
Howard Shelanski, who is at the federal Trade Commission, and he has a fine article with Michael Katz from 2007 in the *Antitrust Law Journal* entitled "Mergers and Innovation." So I find that useful and instructive.

They mention two types of things to think about that I think they put good labels on. One they call "innovation impact," which means if innovation is happening, the industry or market is changing in more or less predictable ways, such as a new generation of technology is going to arrive in a year or two and will be in products. That should be accounted for in how we think of forward-looking merger analysis, and how do we do that as opposed to, say, as some sort of static or backward-looking analysis or review-mirror analysis based on historical market shares. So that's one set of issues.

And the other they call "innovation incentives," how will the merger affect the incentives of the merged firms or perhaps other industry members to engage in innovation, to spend money in R & D, to be motivated to improve their products.

We don't need to use those labels, but I thought, if nothing else, out of respect for Howard, who doesn't happen to be here today, I would mention that and I think it frames some of the questions.

Now the fact is the Agencies look a lot at
innovation, impact and incentives, even though the
Guidelines are, if not silent, very spare in discussing
these issues. The question before us is: Can we say more?
Can we as the Agencies describe what we do? And today how
is this practice perceived, reflected outside the Agencies,
and what would be good things to say if we take this on?

Now I would ask everybody not to set up any
strawman here. The strawman would be: You calculate
Herfindahl, it's totally static, you don't look ahead, and
that's bad. Well, that would be bad, but it's not what we
do. And the Guidelines don't say we do that. They just
don't say what we do very much in dynamic settings.

So I think people who have practiced before the
Agencies or read competitive impact statements or other
materials such as speeches would recognize that we try to
look ahead, we try to reflect the dynamics of an industry,
and the question is: How do we do that? What are the
tools? How well do we do? Can we articulate that?

So I would hope the conversation would go in that
direction. We don't do a static analysis. We don't ignore
nonprice competition. But they require tools and issues
regarding evidence that are different than more of a static
pricing analysis that is so heavily reflected in the
Guidelines.

I want to mention one case, just I again find it
useful, as I did this morning, regarding price
discrimination to put one specific fact pattern out there,
recognizing it's just one. There are many different fact
patterns. But if people want to refer to it or the audience
here, just to have something in your mind, and this is the
FTC's case of the Thoratec - HeartWare merger that they
challenged and blocked last summer. So this case fits into
what I like to think of as a disruptive-entrant fact
pattern, where the incumbent, this was Thoratec, in this
particular case the product was left ventricular devices
which are surgically-implantable blood pumps. I hope we
won't have to worry too much about the details of these
products. But they're critical for people with very serious
heart problems who cannot get a heart transplant.

And the FTC found, alleged that HeartWare was the
only significant threat to Thoratec's continued dominance of
this market for this product. And they had evidence in
terms of FDA approvals that were expected within a few
years, and other potential entrants into the market were
further behind or less likely to succeed in entering.

So in that case there was no current, as far as I
know, product market competition between the two, but this
was -- you could call it potential-entrant case or a future-
product market case. And obviously it relates to innovation
effects. Although, as I understand it, a lot of the
innovation had already been done except there were still
trials in bringing it to market. That part of the
innovation process remained to be done.

We have a number of cases. I think if you look
back over both Agencies' portfolios where we have that type
of pattern, an established firm, a disruptive entrant, and
where we worry about the acquisition merger between those
two.

So maybe that's a noncontroversial fact pattern.
That would be interesting to know that. Then that would
make it easy to include that, but I suspect there will be
issues surrounding that type of fact pattern, how would we
analyze it. How would we determine that that fact pattern
warranted a challenge versus not. And of course again
that's just one of a number of patterns that can arise.

That happens to be in the medical device industry.
I realize none of our industry representatives here are from
medical devices. Happen to be from the tech sector, so it
may be somewhat less relevant because you don't usually have
FDA approval for software and hardware devices, so far as I
know. But hopefully the conceptual framework will still be
helpful in terms of disruptive entrants and industry change.

So, Mark, please go first.

MR. CHANDLER: Thanks very much, Carl.

As one who doesn't even play an antitrust lawyer
on television, it's with some trepidation that I'm going to
offer a few comments regarding the Horizontal Merger
Guidelines. Hopefully even a generalist like me can add
some useful perspective, though I note your comment that
there are people here from real companies made me think
maybe I'm supposed to offer sub-analytical, anecdotal
comments that will be strawmen in their own, so I'll try to
exceed at least that low bar.

PROFESSOR SHAPIRO: I didn't have that in mind at
all.

MR. CHANDLER: Okay. Cisco believes that strong,
properly-enforced, and transparent antitrust laws are
critical to continue technology innovation. In areas of
standards, for example, antitrust law must play a critical
role in promoting innovation and diffusion of technology.
We strongly support your efforts and the Commission as well
to drive greater transparency into the standards process and
to take to task those who use standard setting as a game for
the enshrinement of private economic advantage, and that
happens all the time. We see it every day.

By the same token, clear and relevant Merger
Guidelines transparently applied are critical in a dynamic
environment where acquisitions, along with independent
development and partnerships, are key components to growth
and success.
My company's currently celebrating its twenty-fifth anniversary. We believe that the foresight to identify coming market transitions, the ability to mobilize our internal R & D resources, or to acquire technology from third parties to enable us to move into developing or adjacent markets has been a key component of our success.

We've completed 136 acquisitions over the last 15 years. Mergers necessarily involve guess work. Just as Cisco makes bets on market trends in deciding whether and when to acquire, so too are the Agencies predicting future effects based on incomplete information. I appreciate the opportunity today to add our perspective to how those assessments can be made with the greatest degree of accuracy, for the sake of all parties involved.

We acquire in order to enhance our ability to compete in new market areas. Not all of those acquisitions turn out as planned. While mergers can fail because of misexecution, we've also seen the technologies that we thought would be relevant simply were superseded. I joined Cisco in the $5 billion acquisition of StrataCom in 1996, where I had been general counsel. StrataCom was a leader in wide area ATM, or asynchronous transfer mode data transmission.

While ATM still played an important role, in the decade following the acquisition ATM was largely superseded
by advances in the use of internet protocol as the common
language for internet data transmission.

Other examples abound. Take the AOL-Time Warner
deal. Now it's remembered as one of the most colossal
failures of strategy in business history, at the time though
there was great concern about the pernicious impact the deal
would have on development of the broadband internet, and the
companies had to fight hard to win approval, a process that
took almost a year.

Though I noted in Monday's New York Times Bob
Pitofsky pointed out that the Commission's economist thought
the deal made no financial sense from the get-go, why did
they worry? As Ken Auletta points out in the book Googled,
AOL and Time Warner just did not count on Sergey Brin and
Larry Page coming along and tearing down the walls around
AOL's garden.

My point isn't to criticize any particular Agency
enforcement decision, but rather to emphasize the quip that
I think we heard earlier today, that it's tough to make
predictions, especially about the future.

The Guidelines are especially relevant to this
since the party's view as to whether a second request will
be issued can be outcome-determinative in deal negotiations
in my industry. When a company's most critical assets drive
home every night, the uncertainty for protracted delay can
be deadly. Now as a result the analysis we undertake when we're looking at a transaction isn't just the likelihood of approval or concern about the cost of complying with a second request, but how long approval will take. This has a direct impact on whether some transactions are pursued, since parties may not want to pursue a deal that puts employee retention at risk.

This is especially true here in Silicon Valley, where California's pro competition employment law rules, combined with a density of opportunity, facilitate easy employee mobility. So any change in the Guidelines should drive toward predictability and clarity.

How can both companies and the Agencies increase the odds that we get the analysis correct? To be sure, the laws of economics are not repealed or suspended for high-tech companies or dynamic industries, and robust, traditional economic analysis must remain the essential tool of merger review. The rigor of the economic method allows for incorporation of factors in the analysis which may have been historically undervalued but are nonetheless relevant. The challenge in some cases will be whether there are real world measurable values or whether proxies need to be used and the value of those proxies.

I believe that in high-tech, dynamic markets the focus should be on the anticipated competitive effects of
the merger, keeping in mind that the speed of change, the
disciplining power of customers in an environment where
disruptive innovation can occur with breathtaking speed and
regularity, are going to be critical factors.

In an industry where Moore's Law reigns and price
performance ratios are constantly falling, an analysis based
on the power of participants to raise prices seems at least
to industry participant to miss the point. Let me make this
clear: Raising prices has in my experience never been a
part of any acquisition discussion that I've ever seen at
Cisco; fear of technological obsolescence or the opportunity
to create new markets with disruptively-lower costs to
consumers almost always is.

The current Guidelines leave room for the Agencies
to look to the future in reviewing deals in dynamic markets
and to discuss the right factors. To my mind, however, the
presumption should be reversed. At the simplest level, the
analysis proposed in Section 1.521 of the Guidelines should
be the rule, not the exception, when looking at certain
types of transactions.

In high-tech dynamic markets the presumption
should be that historical market shares are not a reliable
predictor of the future. Change simply occurs too quickly,
and absent regulatory tariff or other artificial barriers to
trade is immediately global in scope.
Backward-looking market shares may be a consideration, but the analysis should neither start nor stop there. Products move from conception to design to worldwide customer availability in months. Product modifications and improvements can be implemented nearly instantaneously to respond to a competitive threat, to seize a market opportunity.

Because premerger concentration is likely to be a poor predictor of postdeal competition, then merger review in a dynamic market needs to focus on effects. It would be helpful if the Revised Merger Guidelines were more explicit with respect to the types of information and sources that are acceptable to demonstrate reasonably-predictable effects. Are internal strategy documents an acceptable source, industry publications, the views of informed customers? We believe each of these has a place in the evaluation of mergers in a dynamic industry like ours.

Mergers in dynamic markets also differ from traditional markets with respect to the phenomenon of convergence. Convergence occurs when companies with different strengths identify the same set of applications as adjacent markets. This can occur extremely quickly as what seem like distinct product markets and participants suddenly come to compete. Current examples include convergence of networking and computing, telephony and computing,
convergence of still and video cameras with multifunction phones.

Cisco's emergence this year as a competitor in the corporate data center, with the potential for dramatic efficiencies and benefits to customers, is based on deploying networking technologies we already had, augmented by acquisitions and our own developments. Yesterday's announcement by two very large industry players, one of whom is represented on this panel, of new data center and cloud architectures and products, was partly driven by our entry, if the press reports and analysts' commentary today is to be believed.

Similarly, it would not have been conceivable several years ago that consumers would chose one multifunctional device, like an iPhone, over multiple devices for photos and video. But today millions of people are doing just that. Five years ago it was unlikely that Palm, RIM, Nokia and Motorola viewed Apple as a competitor. Two years ago it's equally unlikely that Apple viewed Google as a competitor. No merger of competitors in 2006 would have stopped the impact of the iPhone.

Structural merger analysis, with its reliance on historical concentration ratios can be outright misleading in industries marked by rapid change and convergence. If there are indications that convergence is occurring or
likely to occur, the Agency should more expressly incorporate into the analysis the likelihood that new market participants and market dynamics will constrain potential anticompetitive effects of a proposed merger.

The competitive-effects analysis should therefore look closely at postmerger incentives, including the market-growth assumptions and valuation assigned to the acquired company or assets where an asset makes sense financially only if there's high-market growth, and, in fact, acquired companies seek to monetize for themselves the synergistic values of the transaction that would come out of rapid growth. If that's the valuation that's on the acquired company, steps that would frustrate market growth, by working to constrain output or increase prices are therefore contrary to the acquirer's long-term interest in recovering that investment, even if they might increase short-term profits. In those cases the Agency should be receptive to the argument that the acquirer will be constrained from exercising postmerger power by the need to make those expectations real.

Likewise, in predicting competitive effects, reputational cost to acquirers of maximizing short-term profits are relevant. For example, in networking industries, in my industry, customers place a high value on interoperability, in compliance with industry standards.
Our policy generally has been not only to freely license but to license for free anything that we propose as a standard. Customers view deviations from standards and creation of noninteroperable products with suspicion. Customers don't want to be trapped into using products for a senior vendor, and recognize the role that interoperability plays in protecting them from opportunistic behavior. Acquirers with a reputation for creating standard-compliant, interoperable products -- I put myself in that category -- are unlikely to put their reputations at risk for the sake of short-term economic interest in one product segment.

Standards themselves are important for evaluation of entry barriers. Where standards exist, where industry participants play by the rules -- not always the case -- no competitor can exclude entry by refusing to license. Facilitating entry into industries like networking and computing, which rely on strong standards, is why both Agencies should remain vigilant in policing abuses of the standard development system.

All participants in this discussion recognize the importance of innovation for consumer welfare. For many companies in dynamic markets, research and development costs may be high. R & D efficiencies gained through merger may be significant, especially in areas where marginal costs are low relative to price. Nonprice effects like these must be
taken into consideration when assessing mergers in dynamic markets.

The Guidelines have stood the test of time, provide a solid framework for merger review. They do for us, I know they do for many, many others as well. I hope I've provided some food for thought for how they can be even more relevant for dynamic industries.

PROFESSOR SHAPIRO: Thank you, Mark.

Let me just, so everybody who doesn't have Section 1.521 memorized, it refers to changing market conditions. It says -- and this will be relevant for the discussion to come, talks about "How market" -- "Concentration of market share data of necessity are based on historical evidence, recognize as things change," and then says, "The Agency will consider reasonably-predictable effects of recent or ongoing changes in market conditions and in interpreting market concentration and market share data."

And I think you said that's the norm, that you would go down the route, and the question is how would we do it, and so forth. Or a question I put on the table.

Okay. Greg.

MR. SIVINSKI: Well, thank you.

I agree with almost everything he said. In fact, I think what I'll do is carefully go through my comments, prepared comments, and try to avoid repeating much of what
he did say. Mark did an excellent job kind of nailing the
tech industry point of view on dynamic industries and the
role of innovation in dynamic industries.

I want to step back a little bit and talk about
the Guidelines, just briefly.

They've proven to be a very durable guide for
practitioners and for the last many years. As an inhouse
practitioner, I certainly appreciate guidance that's clear,
that's concise, and that's understandable not just to me as
a lawyer but to business clients who are being tasked with
the very difficult choices they face often when looking at
mergers.

Consistency and predictability in that process are
key, and any changes should be weighed against the risk that
consistency and predictability will be reduced.

I share the views of others, including some here,
that the current analytical framework is basically sound,
but that the Guidelines should be revised in a few key areas
to reflect developments and merger analysis in recent years
and, more importantly, to reflect the types of issues that
the Agencies are currently facing that they didn't really
face in great numbers, say, 15, 20 years ago.

Overall I believe the Guidelines should continue
their focus on the analytical framework and on the basic
steps of merger review. Transparency in that regard is a
very good thing. The Guidelines should not, however in my view, try to provide any detailed explanation of a particular analytical technique. If that technique is untested over time or is only used in certain cases or is simply experimental.

Doing so risks enshrining one technique over another, and I think that's an incorrect assumption to draw based on the flexibility that the staff likes to maintain and in what tests and analytics it will apply in any given case. It also risks enshrining them in a way that could lead to false positives, false negatives in the way we look at cases.

Given that the data for one or more of the complex economics tools is simply not available, this would greatly diminish the value of the Guidelines as a resource for advising clients on a given merger.

I can tell you that I have read Carl's paper on upward pricing. I think I understand it and I also think that I could never find the data for it without a great deal of effort in my industry. That presents a problem. Any time that I'm asked to advise a client on the likely outcome of a merger, more detailed explanations of specific techniques that may apply in a particular case can be, I think, better provided through the commentaries, the speeches, and other outlets that the staff and the DOJ and
the FTC have for making those kinds of determinations.

Second, I think the Agency should stick to the
Guidelines current analytical starting point, based on
market definition and market concentration. These are well
known and predictable concepts and allow us to reach an
initial assessment of a merger. I was struck by what Larry
Popofsky had to say earlier. I thought he was exactly right
that there is an intuitive ability, if you've been in an
industry long enough, if you talk to your clients, if you
understand their business, you can reach an assessment very
quickly based on the current Guidelines' focus on market
definition, how that merger may be viewed, at least
initially by the staff.

There's no question that businesses understand
that should a deal go forward, a more detailed competitive-
effects analysis is going to occur, particularly if it's a
difficult deal. But we shouldn't have to derive cross
elasticities or diversion ratios or margins as a first step
to forming an opinion about whether a merger is in fact
going to raise significant issues.

So I applaud the question that was asked earlier
about what are the simple screens that we can employ that
allow us to advise our clients in deals where there is a
horizontal overlap, where there may be some concern. These
things do provide a good basis for making at least some
initial determinations. And I'd echo what Mark said, that
deals don't get done in this business based on the threat of
a second request. So clarity, simplicity, and
predictability are really paramount to our clients.

That said, I agree that there's room to improve
the current Section 1.5, which is flexible enough to
accommodate considerations beyond market structure, but
could do more to explain why market shares and market
concentration are measured in markets experiencing
significant technical change.

I would note, I don't have a solution for you. I
think it's a great idea that the Guidelines should include
some discussion of techniques for measuring shares in
dynamic markets. I think that could add significant
additional value to the Guidelines as a predictive tool and
make it something that's really useful to us in advising our
clients.

Then, third, the Guidelines today distinguish
between fixed and marginal cost. In practice, the Agencies'
tend to credit savings and marginal costs as more likely to
influence price.

You've asked and the Agencies have asked whether
any cognizable cost reduction is relevant and if it's likely
to generate benefits for customers in the foreseeable future
and whether the Guidelines should be updated to address
these nonprice effects. We think the answer is most
definitely yes.

The guidelines should place a greater emphasis on
the benefits to consumers that can result from merger-
specific savings in fixed cost. Current Agency practice
takes a skeptical view of fixed-cost efficiencies and, as a
result, Agencies often have failed to fully account for the
nature of competition in industries like software, in which
fixed costs are substantial.

The software industry as a whole is characterized
well by intense dynamic competition. Mergers that reduce
fixed costs increase incentives to invest in R & D, and
innovation. Moreover, because fixed costs in the long run
are variable, reductions in fixed costs today can generate
significant real savings in the long run as well.

Finally, I'd like to stress that R & D in
particular is important in our industry. Today the
Guidelines note that efficiencies relate to R & D are
potentially less acceptable to verification and my lack
short-term direct effect on prices. Consequently, they get
pigeon-holed as delayed benefits and given less weight.
It's ironic, I think, that when you look at the internal
documents from our companies that the staff will see in many
of these mergers, you will find that in fact it's the
principle reason why we're doing the deal.
So I think it's a reality of our transactions. It's something that should be looked at more carefully. I think the anecdotal evidence, both from the market, from witness interviews, should play a great role in determining the importance.

We think it's time to take a different approach and recognize that innovation is a critical component of growing our economy and that R & D efficiencies that spur information are a key factor in emerging from the current economic crisis.

Focusing on reducing marginal costs alone give short shrift to the point that change and fixed costs of innovation may determine whether that innovation occurs or, more importantly, some other innovation could happen at the same time. This has an obvious consumer welfare benefit in both and the short long-run.

In short, I believe that merger policy unduly focuses upon reduction of marginal costs over the potential for fostering innovation, and that that risks missing the point in missing the forest for the trees.

Thank you very much.

PROFESSOR SHAPIRO: Thanks so much, Greg.

Bruce.

MR. SEWELL: Thank you. I feel like I should offer some sort of disclaimer first, that having now
listened to my two industry colleagues, we did not collude, we did not prearrange this, but, as you'll see, there's a tremendous amount of overlap. Perhaps it's of note that this is may be one of the few times that these three companies are in substantial agreement about anything.

As a corporate representative rather than an economist or a practitioner or a regulator, I'm going to try to keep my comments to areas where I have at least a little bit of experience and offer you kind of a view-from-the-trenches approach to this. Hopefully that will be of some value.

I have a couple of general comments and then some specific suggestions. I'm going to bounce around able, but we can come back to any of this in the Q and A.

So let me start with the very simple proposition but one that I think is fundamental and should underlie any analytical framework in this area. Innovation is a good thing. It's good for companies. It's good for consumers. It's good for countries.

Technology is not a treadmill. It's a staircase where each step rests on the ones that proceed it, but each step also advances the state of the art and advances the consumer welfare. Technical innovation produces new opportunities, new wealth, and new consumer benefits. So at the most basic level the Merger Guidelines should support
acquisitions that are likely to increase the pace of innovation and be critical of or suspicious of acquisitions whose goal or affect may be to delay the pace of innovation. The impact of an acquisition on price, particularly in the short Term, is not necessarily a good proxy for impact on innovation, which at the end of the day may be the more important and significant factor in consumer welfare.

A merger between two powerful R & D firms that produces a new produce with ten times the utility of products in the premerger market is desirable even if the price of the new device may be as much as two or three times the price of the predecessor products that existed in the market. However, under the current enforcement model, it's not at all clear that such a merger would be approved or at least approved in the short timeframe required by companies competing in a highly-dynamic market environment. Let me stress and reiterate what both of my colleagues have said previously, that the issue of a second request is in many cases a determinative decision in whether to pursue a merger.

A quick point about what it's like to operate in the kind of markets that Apple operates in. To do this, let me pick up on a construct that was raised by David and Greg in their responses, their written comments.
The implication of dynamic versus static markets.

The world in which most if not all technology innovator companies operate is characterized by very short product lifecycles, rapid deployment of new features and functionalities, and the routine emergence of new and completely disruptive technologies.

In short, it's commercial chaos. A potential merger between two large distributors of music by compact disk would have looked very different one year before the introduction of the iTunes store than it would one year after the introduction of that service.

By contrast, merger analysis works best in markets with unchanging, undifferentiated products, and costs that are affected more by scale than by changes in technology or a business model.

Rapid innovation complicates traditional merger analysis by severing the continuity between pre and postmerger market definitions; by making it harder to identify potential competitors and new entrants; and by rendering the hypothetical monopolist, the SSNIP test, relatively useless, because in dynamic-technology markets, particularly the ones that my company operates in, feature differences tend to be far more important than a five- to ten-percent price differential.

Switching gears for a second. With respect to the
current Guidelines themselves, and with all due respect, we have today what programmers would call spaghetti code. To execute the analytical routines, you have to apply one patch after another. The end result is overly complex and hard to work with. For the real HHI thresholds, one has to refer to the FTC enforcement statistics. For future competition, see the 1984 Guidelines. And for everything else, go to the 2006 commentary.

Ideally in this round of revisions, we should take a comprehensive, back-to-basics approach. In the process of that harmonization, I would also urge that the Agencies give due consideration to the principle of certainty. To the extent that we end up with some clear guidance about what kinds of transactions will not give rise to an investigation, that is probably in some respects more valuable than certain knowledge about what will.

So a couple of specific suggestions. First, overall reliance on pure market share analysis is misplaced. Market share is often a poor proxy for market power, particularly in rapidly evolving markets. A particularly good case in point would be the Apple iPhone. First introduced in 2007, the rate at which the iPhone has captured share among smartphones has been extremely rapid. Indeed, statistically, given that this device in effect created the category, the iPhone's growth has been
phenomenal. However, it takes only the most cursory glance at the cellphone market to recognize that by no definition could Apple be said to possess market power with respect tocellphones or even smartphones.

We've seen at least four very credible new entrants in just the last three months: Palm, Motorola, Dell, and Google, with additional players, in particular, Microsoft rumored to be preparing to enter the field.

Second, in lieu of a price-based analysis let me suggest that a product-based analysis may be more probative in dynamic markets. So, for example, are the products of the merging firms similar or differentiated. Are there other products in the relevant market that are similar on a feature-set basis or are they highly differentiated? Is there an emergent product which is rapidly gaining share or is likely to disrupt the market? What are the respective gross margins of the merging entities' products?

This is the kind of approach that I think we saw from Vaughn Walker in the Oracle-PeopleSoft opinion, and I think it makes sense in the context of these kind of fast, evolving companies.

Another key factor to consider would be to apply the analysis respective to intellectual property positions of the merging entities. Will the combination produce a patent bottleneck that could slow down or dissuade new
entrants from approaching the market?

Finally, a plea for more explicit guidance regarding future competition. The standard for consideration of future competition is unclear at best. Is it clear proof or reasonable probability. Entities operating in a dynamic market often see competitors long before empirical evidence of actual competition exists. This is a key issue for serial innovators such as Apple. Companies that innovate aggressively and move into new markets tend to be ahead of the competition for at least a while, but the famous quote by Andy Grove that only the paranoid survive is really a reflection of the fact that we consider many companies, both in direct and adjacent markets, to be future competitors.

Sometimes it's not even the new companies but new technologies entirely that will be the most disruptive. The Guidelines should be very flexible and set a relatively low bar in terms of evidence required when accounting for the potentiality of future competitors in markets that have a history of rapid change.

These are just a few suggestions. I hope they've been useful. And I again thank you for giving me the opportunity.

PROFESSOR SHAPIRO: Thank you, Bruce.

David.
PROFESSOR TEECE: Thank you, Carl. First of all, Carl, thank you for the introduction you gave to this session which both delighted me but also surprised me.

It delighted me inasmuch as you pointed out, it's glaring, the absence of a treatment of innovation from the Guidelines is glaring. But you also surprised me by saying, notwithstanding that, that in the Agencies there's widespread recognition that innovation is king. I don't believe that's the case.

I think if there was widespread recognition that innovation is king, the way the Agencies go about their business and the kinds of tools that are used to analyze Section 2 as well as merger cases would be quite different.

I nevertheless recognize that considerable progress has been made, some of you that know me know that I've been beating on this drum for about 20 years, and to find fellow travelers who now say that putting forward the innovation story is a strawman because we've got that part, and in fact we're busy at thoroughly analyzing how innovation drives competition and how competition drives innovation, I'm very pleased to learn that this may be the case.

Although, Carl, I suspect it's true with you and some of the people that you brought to this session, but I don't think it represents where the Agencies are and it's
not where the economics profession is, so I think there's work to be done. There's great opportunity to start that work as we think about revising the Guidelines.

To back up a little bit, it's not a new idea. I mean what we've heard from the industry representatives is of course perfectly true and we know it's true. We know, all of us in this room know that innovation drives competition. I mean this is what Schumpeter told us: The kind of competition, this kind of competition, he's referring to innovation-driven competition, is as much more effective than the other as bombardment is in comparison with forcing a door and so much more important.

If you go back to Judge Learned Hand, he says consumer interests in the long run are quite different from an immediate fall in prices. Yet what the Agencies seem to focus on is an immediate fall in prices. This is how we've come to think about consumer harm. Or an immediate rise in prices is how we come to think about consumer harm and consumer benefit.

If you take innovation as being king, and Carl and I agree that it is, then I think you have to take a somewhat different perspective, and maybe it's a little bit more of a long-run perspective. I think that the time how now come, since the basic point everybody is in agreement with is to say: All right, if in fact innovation is king, what does it
mean in terms of the way we go about doing antitrust analysis?

I think we've only just started down that road. By the time we're finished, it'll be a long time before we're finished, I think that antitrust will look different from the way it does today.

In my view, what we've done in competition policy is that we've essentially accepted static competition over dynamic competition. That almost everything the Agencies do favors static competition and not dynamic competition. And, as I said before, it's not just in merger policy, it's in Section 2 analysis.

Why is it, you might ask, since everybody in the Agencies is a champion of competition, why would they accept the weaker brew? Why have the Agencies and so many of our economists accepted the weaker brew, which is static competition, focusing on short-term price effects rather than thinking about the fundamental question which is: What's the impact on innovation and, the other side of the equation, how does innovation drive competition?

I think the fundamental reason is because we lack and we haven't bothered to focus on developing the analytical tools. So we live with a set of tools which are within our comfort zone and which we can manipulate and pretend to be objective and transparent with, but in fact
those tools continue to degrade the policy, the use of those
tools, the widespread use of those tools, it sometimes
degrades the quality of our antitrust work.

I'm not thinking about a whole bunch of, at least
for me, uninteresting industries where I think the standard
static analysis works. If you're analyzing supermarkets and
goodness knows what else, where there's not much innovation,
I think the standard approaches work. But when you're
looking at the most interesting portions of the American
economy, those standard approaches simply don't work. The
apparatus that we bring to bear is not applicable.

This is true whether you're talking about the
tools of the Chicago School or the post-Chicago tradition.
Unfortunately, almost always those tools assume an
unchanging technology and they assume a fixed set of
products. So whether you're using a Chicago approach or a
post-Chicago approach, what's missing fundamentally behind
it all is a robust theory of the firm. By "the firm," I
mean the kind of firms that are represented here at this
table.

The models that we economists use are poor
caricatures. They are simplifications, and of course
simplification is necessary. But it's not just that they're
simplifications, they're caricatures; and so they tend to
mislead and tend to cause us to focus on the wrong thing.
The basic reason I think why we don't have more adroit antitrust policy that drives what Carl recognizes as -- which supports or favors or gives primacy to innovation, the reason we don't have it is the analytical frameworks. Of course, the Guidelines are about analytical framework, so there's a wonderful opportunity here to get it right.

Now, I think one of the very first and most primitive propositions that has to be understood is that innovation drives competition. I actually spent a little time reading through the various materials of the Agency to see if I could find that proposition. I couldn't. You can find multiple references to the fact that competition can stimulate innovation. And indeed it does. And quoting from the FTC 2003, "Competition can stimulate innovation. Competition amongst firms can spur the invention of new or better products and more efficient process," which is one side of the equation. The other side of the equation, which said innovation can drive competition, is missing.

The evidence, of course, that links concentration to innovation, notwithstanding the frequent reference to it, is weak. And we know why. It's in part because we don't quite know how to define markets correctly, but it's also because there's a lot of other intervening factors. Market concentration is only one of many, many factors that affects the rate and direction of innovation at the enterprise
level, but it's the only factor that is looked at in most antitrust analysis.

If I go back to how do we move towards a better understanding of dynamic competition, in terms of what's needed, I think it is new conceptual frameworks. Let me just rattle off a bunch of concepts; maybe Carl and Joe will tell me that everybody at the Agencies is deeply familiar with all of these and applying them as appropriate, and I know some of them are talked about.

One is the concept of the appropriability regimes. I'm going to rattle off a series of concepts that are well developed outside of mainstream economics. There's a big literature in innovation studies that some of you in this room are familiar with. There's a big literature in strategic management. People who do study innovation have a pretty good understanding of the way that innovation works and the types of organizational structures and competitive arrangements that stimulate innovation and vice-versa.

When I say a pretty good understanding: A much better understanding than you would think based on the kinds of language that you get in the various Agency reports. But that stuff is not being ported over into economics, and it's because there is this difficulty with the basic sort of economic paradigm for neoclassical economics which relies on equilibrium analysis and the assumption that you can
characterize a firm by a simple production function and the marginal-cost curves and so forth. That implicit theory of the firm is being displaced outside of economics, but economics as a discipline is not talking to the field of strategic management and vice-versa, with the exception of certain small domains that I can come back to later.

The concept of the appropriability regime, the manner in which firms are able to capture returns from innovation. The concept of technological opportunity. Actually if you go back to Scherer's textbook, he used to talk about technological opportunity and how that affected competition. That seems to have been dropped in the last 20 years from at least most of the stuff that I've read from the Agencies.

In areas where there's rich technological opportunity, then in fact the kind of surprises in being “only the paranoid survive” is true in those types of environments. But are the Agencies trying to map technological opportunities as an environmental variable? No, they're not.

The concept of a technological paradigm, the way there are some regularities in the way technologies evolve. I think there's some understanding of that but little talk about it.

Certainly the cumulative nature of innovation,
various types of innovation they discuss. The notion of
compétence and the fact that you can have, I think,
competency enhancing innovation and competency destroying
innovation, I think there certainly is a notion of
disruptive innovation. In fact, you heard Carl mention that
earlier, but there is a very rich literature outside of
economics which I believe is highly relevant. Now it's very
untidy, but just because it's untidy and will therefore make
the lives of the staff at the Agencies very uncomfortable,
and it's going to take everyone out of their comfort zone to
go into this is not a reason not to do it. And yet I
believe that is the reason why it is not embraced. It's not
embraced because it complicates life, and a lot of the
shibboleths that we like to hold onto in antitrust are going
to get challenged if you take this literature seriously.

So it's going to take a lot of work, but the good
news is that there is more than an emerging literature,
there's a wide body of research, it's not bad, that I think
can usefully inform antitrust analysis.

And there's been almost no work done to port that
over. I know because when I read that literature and I read
the antitrust literature and I think about the crossover
articles, they're almost not existent at all.

PROFESSOR SHAPIRO: Well, then let me ask you
then, David. So we've heard from the industry
representatives' --

PROFESSOR TEECE: Yes.

PROFESSOR SHAPIRO: -- desire for predictability and some certainty and speed in review. I think there's a consensus that the primary function -- I don't want to overstate this -- but the Guidelines in large part should provide a framework for how the Agencies will analyze things.

I think we very much, because we're trying to predict things, particularly in uncertain markets, we tend to focus a lot on the incentives of the firms and how the merger will change incentives, which we think we can understand.

You suggested that we should then, I think I'm hearing you say there are certain analytic tools that are not being used because they're disfavored and not appreciated.

PROFESSOR TEECE: Right.

PROFESSOR SHAPIRO: So could you -- and I'm trying to come to the very practical perspective --

PROFESSOR TEECE: I know you are.

PROFESSOR SHAPIRO: -- of if we, the Agencies are going to put in material to describe how we analyze innovation in some of these dynamic markets, and we can talk about how we'll change Section 1.251 and market shares, that
we can talk about, that's a good thing, --

PROFESSOR TEECE: Right.

PROFESSOR SHAPIRO: -- I've heard a call for that, can you point to specific analytic tools that you think should be included in the Guidelines with the other admonition, a number of people have said we don't want to throw stuff in there that hasn't been tested that's experimental -- I think, Mark, you said something along those lines.

So if you could wrap up by indicating --

PROFESSOR TEECE: Yeah.

PROFESSOR SHAPIRO: -- a tool or two, a specific thing that your broader perspective would bring, that would be helpful.

PROFESSOR TEECE: Absolutely.

COMMISSIONER ROSCH: I'll throw out one other challenge. That is all of the speakers and yourself included talk about the virtues of innovation on a long-term --

PROFESSOR TEECE: Right.

COMMISSIONER ROSCH: There's no question that in some markets, we're not talking about yours specifically, Mark, or yours, Greg, or yours, but in some markets, the multi-sided markets, they create barriers to entry, and so they are long-term drivers of innovation. There's no
question about that.

So what do we mean by long term? What do you mean by long term? How long do you think the Agencies should wait for these markets to correct themselves? How --

PROFESSOR SHAPIRO: Okay. We have multiple questions on the floor.

PROFESSOR TEECE: Okay. Well, let me make a more general statement first, which is the burden should not be on me. I've been beating this drum for 20 years and now you say, gee, but if you can't lay out the fully panoply of what we need to do, we're going to continue on doing what we did before even though we know it's wrong.

PROFESSOR SHAPIRO: All right. David, if you --

the Guidelines are not about imposing burdens.

PROFESSOR TEECE: No, no, no.

PROFESSOR SHAPIRO: Or presumptions. So if you care to suggest --

PROFESSOR TEECE: Let me drop several practical things --

PROFESSOR SHAPIRO: -- then that would be helpful.

PROFESSOR TEECE: You know given that there's a lot of arbitrariness in the Guidelines already, timing of entry and so forth, an arbitrary timeframe is the length of the product lifecycle. You know the long term is something beyond the length of the product lifecycle and the short
term may be something inside of it.

There's a whole bunch of points that I make in my outline here and Greg Sidak and I have a paper which is in the Journal of Competition Law and Economics, which tries to go into some of these issues. I think you end up, first of all, not being enthusiastic about market definition, at least the way that it's done, focusing not on the products per se but on the capabilities of firms.

A more confident way to think about the strength of competitors and so forth is to look at their capabilities rather than to look at where they are in the market. The market is a current snapshot and an expression of their capabilities in terms of the set of products they're currently doing, but you have to back up in a Penrosian sense to the firm's basic resources and asset base. So you have to do more analysis of the firms themselves rather than of what's going on in the market.

Look, there are not clear answers to a lot of these, but that's not the reason. We shouldn't be looking under the light, the old story of the professor that lost his keys looking in the lamppost because that's where the light is better. There's a lot of that going on. And I think we're focusing our efforts the wrong way.

We've got to break out and start to follow the natural implications of what Carl has just said.
PROFESSOR SHAPIRO: Okay. I think --

PROFESSOR TEECE: I know I'm out of time. There's
ten points around revisions that are in the last of my
slides, and I'm sure we can come back to them in the
discussion.

PROFESSOR SHAPIRO: Thank you, David.

Tim.

PROFESSOR BRESNAHAN: Well, like David, I study
competition and innovation for a living. But unlike him, I
think I'm going to be Dr. Incremental to his Dr. Millennium
in terms of change.

Largely here I'm responding to the worry I heard
from my industry colleagues, which I have not heard this
time for the first time this afternoon, that particularly in
technology-intensive industries, because of the way they are
written, the Merger Guidelines and other policy documents
are hard to decode.

Where if you're in a mature consumer-products
industry and you have antitrust counsel who has been working
on mature consumer-products industry cases for many years
before the Agencies, you can get a lot of predictability
about what's going to happen to your deal in timing as well
as in outcome, that's much harder in industries where things
change more rapidly.

However, if we look at the broad spectrum of this,
the revision to the Guidelines has to pick up not only the extremely dynamically-competitive industries which are my neighbors here in Silicon Valley, but it needs to pick up the broad brush of industries. In the broad brush of industries, I would say, there are some findings from the systematic study of competition and innovation which matter. The first one which comes out of exactly the kind of literature that David was talking about is most of R & D is D. There's not a lot of R out there. In most industries, most of the time, the players a couple of years from now and the players today are going to be the same players. So we should not necessarily worry in a lot of industries if -- to follow Gilbert and Sunshine, for example, and think about using R & D data to define dynamic markets. I mean it's got a long series of problems in most industries. You can't figure out what the R & D is brought out. You know products, you know who bought them. R & D, you don't know easily from the outside quickly to give people in merging companies some certainty that they know how their deal's going to be looked at. You don't know where R & D is going. So I would be against something that has sort of a quantitative flavor that's more forward looking along the lines of Rich Gilbert.

The other thing I'd say is that we shouldn't forget that just as innovation is very important for
competition, competition is very important for innovation. I think the most important part of the stories we heard from the three industry representatives this afternoon is how important dynamic competition has been.

So I would argue for a more careful statement about what kinds of factual evidence can be brought to bear by either side, either side, in an antitrust case that current market shares aren't the thing you want to look at.

So the first one, let me take the prosecutors first, because I think that's maybe easier. Carl suggested the idea of a merger with a disruptive entrant. I think everyone would have to agree that a merger with -- if we could follow David Teece the full way, the disruptive entrant is the only one that has the relevant capabilities to come in and compete. And a merger with a -- well, I would want to put a fairly high factual proof threshold along the lines of those FDA records. I find the FDA records reasonably attractive. On the other hand, --

PROFESSOR SHAPIRO: You do need proof that there's not three other guys who are also doing the same thing.

PROFESSOR BRESNAHAN: And proof that there's some reasonable proposition that it's actually disruptive and it's going to work out, because in many, many contexts, you're forcing on a disruptive entrant. If you require them to enter and build up.
Take the industries where you need not only purely technical capabilities but you also need widespread distribution capabilities. Here is an example where I would say the efficiencies from a merger can be in the foreground. Every time there's a press release somewhere that says that this is a disruptive technology, you don't want that to be the factual foundation. I mean there have been 75 of those press releases issued within five miles of here since we started this particular session. They are going to change the world, and more power to them.

So similarly on the defense side, I like Mark Chandler's articulation a lot. His is an industry where there is a proven track record in historical data, not necessarily market-share data, that there's been a lot of change in entry and that his company has been very effective at bringing into connection with its established assets, particularly connection to customers new technologies. So I would say that you could really put a factual foundation on that.

I would say the same thing on convergence. You might think and, again, I want to be symmetric, just because we're thinking about Guidelines here and you want to think about being on both sides of the same fact issue, whichever side of the case you're on.

The Agencies might be tempted to say about
convergence: Looks like these two areas which used to be really separate are converging and these are the two companies that can do it, and so we're not going to let them merge even though the merger today looks vertical or end to end.

I'd want to put a fairly high factual foundation under all of the elements of that. The convergence is really going to happen. The convergence between the computer business of Northern California and the entertainment business of Southern California was predicted pretty much every year before the iTunes store opened.

So, again, you got to be careful when you're thinking about things that you can put in Guidelines and I would say we will look at real evidence that things are about to change on the entry side or on the convergence side, both in forming our theory of why that might be a harm to competition and especially in forming our theory of why there might be no harm to competition from these two particular parties.

I think expanding what kinds of factual bases, historical track and industry level of change that is going to be one; historical company behavior and reputation I think that's going to be another. Those are going to be very helpful.

I think incentives changes for R & D is another
area where much good could be done. Mark in particular and
to some extent Greg talked about the efficiencies that can
be achieved by getting rid of duplicative R & D efforts.

And I think they're right. In industries where
there's a high ratio of fixed-to-variable cost, which is not
all dynamic industries, that's a cognizable, competitive
effect. The tricky bit there, I think, is telling the
difference from the outside between the duplicative
innovation efforts, where you'd really like to get one of
them shut down, and the antiduplicative innovation efforts
that go with, for example, the story of the disruptive
entrant. So there's some tension between trying to argue
both of those points at once.

Here I think my advice to the Agencies would
probably be: Don't try and do too much, because if you try
and get in the game of figuring out when the entrant really
has a different idea versus when it's duplicative, certainly
at an early-screen stage that's going to be helpless and
that may be helpless even in the end game.

And, noting my lateness, as past me, the time's
up, I think, with particular force.

PROFESSOR SHAPIRO: Thank you, Tim.

I have to say in having worked with a lot of the
companies, a number of companies out here, and also been in
Government, a number of these comments really -- I often say
this to friends who don't do antitrust, the companies here
in Silicon Valley and other innovative companies, they say,
'My market's so dynamic, I'm looking over my shoulder. I
can't sleep at night. And then I go into the Government and
they think I can just rest on my laurels or raise the price.
They don't get it.'

And so those are sort of the culture differences
across from coast to coast, if you will. We're trying to
get it as best we can.

Let me be very focused here because we have not
that much time left and there's a lot of stuff on the table
here that's really interesting actually to me and I suspect
to others. Let me focus on two areas -- first this
particular section actually that I think Mark mentioned, can
we measure, adjust market shares so that we look -- we're
still going to use markets and market shares. So how do we
do that in a dynamic setting? That's one thing.

And the other thing is efficiencies and R & D, and
I get to that, too.

But the first one, so I guess it seems to me that
the Guidelines could be updated to say: Look, we can look
at historical market shares, but we can do more. We can
look at trends in those. We can try to factor in new
companies that are coming in or companies whose products are
ending their lifecycle, to come up with a projected market
share a year or two out.

This is still, I understand, it's market share, it's based on markets. There are all sorts of criticism. We could say about how we do that a little bit. I sense, Greg, that you would welcome that, and I don't think this would be creating something that's totally alien or unknown. I mean we do this actually already to some degree.

Would that be welcome? Are there pitfalls? Short responses for people who want to speak to that.

MR. SIVINSKI: I'll start out and say, yes, I think that's actually the kind of guidance that could be most useful. I think part of the frustration you hear from companies generally is that Guidelines are silent on these issues and we don't feel like we're having a conversation with the Agencies about it.

Something that said we're going to have that conversation, that the standard of proof applied will be uniform as between looking at anticompetitive effects versus procompetitive efficiencies. Those kinds of basic procedural clarifications I think would be very useful.

PROFESSOR SHAPIRO: And let me actually amend this while still getting more responses. One could also imagine saying if market shares have been quite variable and not stable, then we would tend to give concentration less weight
because it's not as good a prediction of the future.

MR. SEWELL: Yes. Let me just quickly, I think picking up on Commissioner Rosch's idea, there is a temporal notion here that is very, very important. And so to look at the market share as a static element is, I think, missing a lot of the dynamic aspects of the industry.

When you have very rapid gain in share, when you have volatility in share amongst the various players, all of those are factors that I think should sort of indicate to the Agency that this is perhaps a more dynamic, a more volatile market. Whereas if you have persistent high shares and very little turnover amongst the companies responsible for that share, then it sends a different message.

PROFESSOR SHAPIRO: And this is in principle neutral in the sense you have a company with a small share up and coming that could cause more of a concern.

MR. SEWELL: Absolutely.

PROFESSOR SHAPIRO: But in another case it could go the other way.

Tim, you were nodding, did you want to or...

PROFESSOR BRESNAHAN: I just want to say yes.

MR. CHANDLER: I would say, Carl, it wasn't I, by the way, who said don't put untested variables in. I think my point is more there are going to be some factors that are going to be more qualitative in nature and I think David's
quip about the professor looking where the light is the
tyranny of hard variables. You can measure an HHI.

I was struck by the comments from some of the
previous workshops from people who decried the rigidness of
HHI because it wasn't really applicable in a lot of cases,
and then they started looking at what the alternatives were
and they said, 'Well, at least we understand that, so please
don't touch it.' And I think there's that danger.

So I can say some of these are qualitative and
will require hard work of analysis in saying maybe we don't
have great proxy variables for them, but they're the real
world. So you go talk to customers. You look at what's
going on in the industry. You look at where the venture
money is going and how much money is being put into new
potential entrants there, to say how dynamic is this market,
how different is it going to be tomorrow.

And recognize that the players who are in the
position of making acquisitions at that time are equally
affected by what's going on in the venture world, whether
they think that market is going, and that's a huge factor in
their motivations.

Now motivations may be nice. I know you're
worried about the fact: Is price going to be increased
afterwards.

PROFESSOR SHAPIRO: Well, let me push you a little
bit to see where that goes, Mark.

I think -- and this is meant to be a template of the type of puzzle that we face a lot which is you mentioned the venture capitalist. Suppose we got a situation where the two merging companies are important current competitors, as measured by shares, as measured by the perception of each other, whatever evidence you want to talk about. But there is a lot of people trying to get in. There's venture capitalists, there are start-ups that are trying. It looks like a growing area. There's technological opportunity, to bring in the important term David mentioned.

The Agencies tend to say, well, look, we don't really know what's going to come of that stuff. We see you guys are in there and now competing, so we're going to give a little weight to that.

Well, as in the Valley people say, 'We better not rest on our laurels. All these guys are coming out to get us.' There is a tendency to discount some of the future stuff when it seems uncertain or speculative. In the antitrust analysis can we -- should we change that?

MR. CHANDLER: Well, let me respond to that.

PROFESSOR SHAPIRO: And then David afterwards. I know you've been trying to get in?

MR. CHANDLER: And I'll stop. Here's the problem, very few of our acquisitions are horizontal. I mean
generally we're looking at adjacent markets, and that's the case.

COMMISSIONER ROSCH: You're at the wrong workshops then, but okay.

MR. CHANDLER: That's another question, but that's okay. But there are cases where they are. And what's interesting to me is that the Agency's analysis focuses on a horizontal piece, whereas what we may be interested in the acquisition has nothing to do with the area of product overlap, but with some other technology that's there.

PROFESSOR SHAPIRO: Or capabilities that you're getting, I imagine?

MR. CHANDLER: It is, or capability that's going to be relevant going forward in what's a very different marketplace. This is a little sensitive at the moment, but if Skype and LG and Panasonic are going to try to bring Skype-like video to high-definition television sets in people's living rooms, then you question why would people who are both active in high-definition telepresence try and merge? Are they trying to make themselves bigger or is there some other technology there that's going to be relevant to a video world that's going to look totally different in a few years? And you have to then be in the business of assessing, well, is it really going to look totally different in a few years.
PROFESSOR SHAPIRO: And we try to, in that sort of situation, try to arrange a fix that will solve our concern and still let you guys go forward with a lot of those nonhorizontal issues.

David, I know you've been trying to get in.

PROFESSOR TEECE: You have to think that the enterprise that you're in is really extraordinarily ambitious because you're trying to create some guidelines that work across the entire economy, from potato chips to silicon chips.

I know there's anathema to drawing sort of industry lines, and I don't think you should. But I wonder whether or not you can't draw lines around the types of competitive regimes. Find a clever way to do it that sort of characterized these highly dynamic industries. And then the kind of tools that you use for supermarkets where they work just fine. No one should wheel them out if you're talking about semiconductors or biotech, or what-have-you, and that you get a more granular understanding of where the tools work and where they don't work.

And one aspect of these markets where dynamic competition rules, in my view, is that potential competition is more important than actual competition. I mean indirectly all the antitrust analysis that we use in mature industries, it's focused on actual competition, and so the
potential competition is a bit of an after thought. But if you actually look at the biggest drivers of competition, it comes from the new entrants, and innovation that upsets the existing order and, in effect, moves innovation across all sectors of the economy comes from the outside.

So I think in these different environments it also elevates the importance of potential competition, which affects merger analysis both ways. It means that some will get through and that maybe wouldn't get through now and it may mean that some that get through now wouldn't get through in the future.

But there's sort of explicit recognition of the different role of potential competition in these environments, where, as Andy Grove said, "Only the paranoid survive," because, in fact, it is fear of not just the identified potential competitor but the unidentified potential competitor that's driving daily decisions.

PROFESSOR SHAPIRO: I guess, you know, one of the questions: How far do we go to try acknowledge and recognize these --

PROFESSOR TEECE: Yes.

PROFESSOR SHAPIRO: -- potential competitive things that may be hard to discern or identify? I mean you go pretty far in your submission, saying where innovation
activity is high, one should presume it and monopoly power
does not exist. And I don't think we would want to go
nearly that far if the combined shares were very high, but
at the same time want to acknowledge these forces of
potential competition. And that is a puzzle.

I think we totally take onboard that since we do
have to apply to all the industries, we --

PROFESSOR TEECE: It's tough.

PROFESSOR SHAPIRO: It's tough. But that's why I
want to focus on that section, about changing market shares,
okay, which may not apply to the supermarkets -- or it could
in a way. But it could be flexibly described where they are
changing.

The other section I think -- so the other thing,
to fill the gap, if you will, of saying so little in the
Guidelines about innovation is to have a separate section or
subsection, whatever, paragraph of some sort, that talk
about effects on innovation of a merger and innovation
incentives.

And this, I think, because I want to ask what you
all think might go in there and kind of maybe lead the
witnesses a little bit, at the same time bringing in the
points about efficiencies. Okay. So one of the things I
think has happened is because the Guidelines focus so much
on short-term pricing competition, they naturally focus on
marginal cost, which does affect directly the incentives for prices.

However, if you start to talk about R & D, product introduction, product quality improvements, those are things in which some of these costs that are fixed for the purposes of the pricing analysis are no longer fixed. It's how much do you have to spend to introduce that new product.

So if we think about another dimension of competition, innovation, let's call it broadly, we naturally would credit efficiencies if they were merger-specific and otherwise. They wouldn't be fixed, they would be variable with respect to the decision at hand, namely, improving products. We could then try to analyze how will the merger affect the incentives of the merging firms to introduce new products.

We could see the natural thing, from my perspective at least is then to say: Well, maybe you save a bunch of money on -- I won't even call them fixed costs -- R & D costs, let's call them because they're not fixed now. And yet there's some potentially reduced incentives if you are going to go after each other's products that you would have cannibalization. So there would be basically a diversion that would be internalized, you might have fewer incentives to innovate. And then you've got the appropriabiltiy issues as well. You might have a greater
appropriability. So by talking about efficiencies, cannibalization, and appropriability, one could imagine telling a story that would be general but helpful regarding innovation effects. It would apply to some industries, not others. We wouldn't say which industries. I'm curious about reactions to that.

David, first finger up in the wind.

PROFESSOR TEECE: The spirit of the question is precisely on point, but I think you have to broaden it to beyond sort of efficiencies, because efficiencies is almost sort of a static concept. I know you mean dynamic efficiency, but it's a lot of the mergers and asset acquisitions are done for reasons that are not thought of by management as efficiencies but as effectiveness for appropriability, for complementarities, and what-have-you. So I think you have to kind of find a new vocabulary to sort of getting the socially desirable -- you want the most socially-desirable arrangements, and I'm not sure that people's notions of efficiency necessarily capture that.

PROFESSOR SHAPIRO: Well, in merger law I would say efficiencies are a pretty well established term. So rather than change that term, if one is going to do something, you might explain what would count as a merger-specific efficiency in this context.

PROFESSOR TEECE: Okay.
PROFESSOR SHAPIRO: So I think that if you take as
a friendly amendment.

PROFESSOR TEECE: Fair enough.

PROFESSOR SHAPIRO: Tim.

PROFESSOR BRESNAHAN: Carl, I like your
articulation a lot, but let me rephrase it slightly.
Suppose you were to take seriously the suggestion that there
are industries in which looking at price effects is not the
first order competition problem. Then so you might say
we're thinking about market shares one product cycle from
now. We're thinking about the costs of introducing better
products one product cycle from now. We're thinking about
the futures of those products rather than really about their
prices.

And we're thinking about what firms today, because
we have to make our decision today, what firms are in a
position in terms of their incentives and capabilities to be
bringing those new production features in. And would this
merger seem to change, for the worse, the competitive
incentives, to bring out the features customers really want.

I mean that seems like that really wasn't about
efficiencies, but it was I think the same thing you said.
That seems like an inquiry that, particularly if there were
documents from the merging firms in hand, and lots of the
relevant industries would actually be an answerable inquiry.
MR. SIVINSKI: I'd like just to agree with that for the simple reason that I don't think we've really addressed Commissioner Rosch's question about mavericks and tipping markets. And I don't want to leave the impression at least Microsoft as sitting up here saying all our deals should be left alone because they're innovative. I think there needs to be some way of looking at these things, and actually that strikes me as a quite sensible way of looking at it.

PROFESSOR SHAPIRO: I'm thinking this would be actually very parallel at least to an economist's way of thinking to what we do on pricing, we're just doing a similar analysis for innovation or product improvement. There are different variables. Some costs are fixed variable, and so forth.

MR. CHANDLER: To also bring customer power into this as well in the sense that, especially thinking about diversion ratios, that the markets aren't entirely distinct between present-generation products and future-generation products. And so there are going to be situations where customers will be able to use the prospect of competition in the next-generation market to constrain any efforts to raise prices with the present production generation. That's another factor I think needs to be taken into account.

PROFESSOR SHAPIRO: I like that as well.
The other thing I should actually respond to what David said, one could imagine saying, well, look, we've looked at this dimension, product-improvement innovation, and we see some creditable efficiencies. And, yes, maybe there are some adverse effects on price. You could imagine weighing them. It's very hard. Or at least in principle saying, you know, there's enough good stuff here for the longer term, that I'll tolerate something.

Now, you don't want to have consumer harm in the short term for totally illusory benefits, and that's an issue. Okay, how likely are these things to happen, and I doubt we would address that except to note that longer-term benefits should be much more than speculative in order to be credited.

Let me open it up. Tom, I know you --

COMMISSIONER ROSCH: It's not anything new.

PROFESSOR SHAPIRO: All the better.

COMMISSIONER ROSCH: The General Dynamics --

PROFESSOR SHAPIRO: Right.

COMMISSIONER ROSCH: -- of the analysis, for example, --

THE REPORTER: (Raises hand to indicate the need for the microphone.)

PROFESSOR SHAPIRO: You need to turn that on. I think we've told you they have to turn that on.
COMMISSIONER ROSCH: Yes. And in some instances current market share is not a good predictor of future market shares. So the notion of looking at trends; the notion of looking at where the venture capital dollars are going; the notion of looking at, in general, that factors that point us to whether or not the past is prologue, it's not anything brand new. It's something that we are familiar with and we should use and they should be in the Guidelines. I'm completely in agreement with all of you gentlemen on that score.

I think where I depart, at least maybe, is that I tend to think take key question is indeed, Mark and Greg and Bruce, it's the time horizon. It is temporal.

I disagree with you, David, that the reason the Agencies don't look at dynamic efficiencies is because we just don't have the tools. The reason I think that the Agencies don't pay as much attention to that is because it is very long term in many instances. It is very long term. And there is a real possibility that the consumers will suffer substantial injury in the interim, in the meantime.

That's, I think, the principal concern in this whole area. That's all the concern I think that underlies the emphasize on marginal cost or variable cost, if you will, versus fixed cost. Fixed costs are variable over the long term, there's no question about that, Carl. But how
long should the Agencies as public enforcement Agencies tolerate that long term? That's really to me the central question. That's the question we need to address in any kind of revision of the Merger Guidelines, to take into account these dynamic markets.

PROFESSOR SHAPIRO: Well, I think this is moving us forward. I'm happy to say there seems to me there's a fair bit of consensus while some differences about things that could be quite useful and improvements on the Guidelines. How far one could go is not clear maybe.

I feel like we should stop because it's after time and people probably want to get moving to wherever they're going next. So let me really thank the panelists for a wonderful session, for bringing so much to us, and thank you all for attending.

You can always go to the FTC website. There will be a transcript eventually, the other workshops, and we're always welcome to hear more from you. So thank you all, and join me in thanking the panel.

(Applause.)

(The Workshop was adjourned at 5:19 o'clock p.m.)
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SUSAN PALMER

CERTIFICATION OF PROOFREADER

I HEREBY CERTIFY that I proofread the transcript for accuracy in spelling, hyphenation, punctuation, and format.

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NANCY PALMER