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Understanding Single-Firm Behavior: Empirical Perspectives Session

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Wally Mullin, *George Washington University*

David Reitman, *CRA International Inc.*, et al.

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UNITED STATES FEDERAL TRADE COMMISSION
and
UNITED STATES DEPARTMENT OF JUSTICE

SHERMAN ACT SECTION 2 JOINT HEARING
UNDERSTANDING SINGLE-FIRM BEHAVIOR:
EMPIRICAL PERSPECTIVES SESSION
TUESDAY, SEPTEMBER 26, 2006

HELD AT:
UNITED STATES FEDERAL TRADE COMMISSION
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1 MODERATORS:

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Commissioner

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and

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11 PANELISTS:

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2

3 Introduction..... 4

4

5 Presentations:

6 Jonathan B. Baker..... 44

7 Luke M. Froeb..... 18

8 Robert C. Marshall..... 77

9 Wallace Mullin..... 30

10 David Reitman..... 67

11 F. Michael Scherer..... 8

12 Clifford Winston..... 51

13

14 Moderated Discussion..... 86

15

16 Conclusion..... 130

17

18

19

20

21

22

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P R O C E E D I N G S

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3 DR. HEYER: Okay, first, it's a pleasure to be
4 here, and since you're probably less interested in what
5 I have to say than what these people have to say, I am
6 going to be brief before turning things over to Bill.

7 I wanted primarily to thank some people, not
8 only the panelists for giving us their time and soon
9 sharing their insights with us, but I wanted to thank
10 particular people at the Antitrust Division who have
11 helped prepare this and helped prepare me.

12 We have some people from the Legal Policy
13 Section in the Antitrust Division, Deputy Chief Gail
14 Kursh, who in an earlier life helped manage the Dentsply
15 case, which you will hear more about from Dr. Reitman
16 over there. One of the attorneys in her section, Joe
17 Matelis, crackerjack paralegal Brandon Greenland, and
18 most importantly, June Lee, one of the economists in the
19 Division, who, in addition to putting up with all the
20 administrative stuff, has actually contributed
21 substantively.

22 So, with nothing further, I am going to turn it
23 over to my distinguished colleague and co-moderator,
24 Bill Kovacic.

25 COMMISSIONER KOVACIC: Welcome to the New Jersey

1 Avenue Conference Facility on September 26th, the 92nd
2 Anniversary of the adoption of the Federal Trade
3 Commission Act. We're delighted to have you all here
4 today and to focus on what I think is one important
5 dimension of the assessment of what standards for
6 unilateral firm behavior ought to be. Many of the
7 presumptions that run throughout discussions of doctrine
8 and policy involving the enforcement of competition law
9 against dominant firms derive from empirical judgments
10 about the state of the world. To read judicial opinions
11 and see how often the opinions say "we know, it is
12 believed, it is thought, the world is," and then to look
13 futilely in the footnotes for what editors in journals
14 would note and say "Add cite," is a striking phenomenon.

15 More than that, when you take a look at the
16 papers of some of the Justices of the Supreme Court,
17 papers that have become available, you see how
18 frequently in their deliberations they're relying upon
19 hunches, judgments or assessments about the state of the
20 world and the way in which business behavior has been
21 used in the past, and about the significance of that
22 behavior. It's impossible, in short, in looking at the
23 full range of history and enforcement policy and
24 judicial decision-making, to escape the significant role
25 that assumptions about the state of the world play in

1 the formulation of doctrine.

2 Our aim today is to address three questions and
3 to try to link empirical work that's been done or might
4 be done in the future to the development of standards.
5 Three questions really animate our session today.

6 The first is to consider what past empirical
7 work tells us about how firms become and remain
8 dominant, to look back and, at least selectively, to
9 take a look at what work has been done by empirical
10 researchers, whether in the form of quantitative work,
11 whether in the form of case studies, whether simply in
12 the examination of the way in which judicial decisions
13 or enforcement decisions have affected the way firms
14 behave.

15 Second, and more forward-looking, is to ask what
16 we would like to learn if we could, what additional
17 facts would we like to have if we could get them in
18 principle.

19 And last, based upon what we offer as an answer
20 to the second question, how might we go about doing it?
21 What combination of effort within public enforcement
22 agencies, among think tanks, academic research centers
23 or other bodies, might provide the means by which
24 important empirical questions could be answered?

25 Later today, as Ken has, I will acknowledge the

1 many contributions of our professional staff that have
2 made the event possible. For now, to begin, I just want
3 to remind you of a couple of housekeeping details about
4 the session.

5 The first is to respect our speakers by turning
6 off all of your communication devices. I was at a
7 hearing a couple of years ago in the federal courthouse
8 where the bailiff stood up and said, "If your
9 Blackberries or cell phones go off, you will be
10 removed." We won't remove you, but please do honor this
11 convention.

12 Second, those of you who want to make your way
13 to the restrooms, they are through the lobby -- the
14 signs are marked -- between the elevators and off to the
15 right. Now and then, there are planned or unplanned
16 fire drills and alarms. If one goes off, we and our
17 staff will lead you out to the street, to the right,
18 back through the lobby, and we will simply gather out in
19 front of the building until it is possible to return.

20 To begin today, we have divided our session into
21 two parts. We are going to have a series of
22 presentations before we take a break, and then we will
23 have a larger discussion joined by two of our panelists
24 who have agreed to discuss what they have heard and then
25 to add comments of their own about the proceedings.

1 To get us started is Mike Scherer. Mike is as
2 renowned and significant a figure in the modern
3 development of economic research and analysis at the
4 Federal Trade Commission as there is. Going back to his
5 time as Bureau Director in this institution and through
6 his recurring assistance, research and analysis, I think
7 it is fair to say that, in the illustrious collection of
8 those who have served as Bureau Director of the Federal
9 Trade Commission, none has been more distinguished in
10 that very hall-of-fame like collection of individuals.

11 Mike is also well known for the extent to which
12 not simply has he done theory, but one of the reasons we
13 asked Mike to come here is Mike's particular affinity
14 and interest in empirical work and the extent to which
15 empirical work, as well as history and an examination of
16 the past, has figured into his own scholarship.

17 Mike, please, thank you.

18 (Applause.)

19 DR. SCHERER: Thank you for those kind words,
20 Bill.

21 Let me just briefly address the third of Bill's
22 questions, how to learn. In many ways, I have been a
23 disciple of Joseph Schumpeter, not the stuff he wrote
24 about monopoly and technological progress, but what he
25 wrote about how economics advances. Schumpeter argued

1 that economic analysis was all about three things. It
2 was about theory, it was about statistics, and it was
3 about history. To do economic analysis right, you need
4 all three, and I have tried hard to do all three of
5 those things. I think in the profession now there is a
6 bit of an imbalance; in particular, we do too little
7 history.

8 I am not sure whether it was distributed or
9 whether it is on the web or whatever, but I do have a
10 background paper for the meetings entitled
11 "Technological Innovation and Monopolization." It is a
12 case history of seven great high-tech monopolization
13 cases in the 20th Century, and the thrust of my remarks
14 will be based upon that paper.

15 Now, first of all, how do you monopolize? Well,
16 it is pretty well known. Mergers, here we have very
17 strong precedent, so I won't dwell longer. Natural
18 advantages, such as economies of scale, the control of
19 natural resources, network externalities and the like,
20 these are fairly rare except in the traditional
21 regulated industries or in those cases where you define
22 the market very narrowly, as in certain pharmaceutical
23 deals.

24 The most interesting one is surely superior
25 efficiency and especially technical innovation. These

1 pose the hardest cases for antitrust. When a firm
2 achieves a monopoly position through superior efficiency
3 or innovation, one faces very difficult trade-offs. We
4 should clearly, clearly be encouraging technological
5 superiority, but where is the line crossed? That is the
6 really tough question.

7 A subset of this is patent accumulations. In at
8 least two of the seven cases I analyzed, that is the key
9 to how firms monopolized, specifically, General Electric
10 in the lamp case and AT&T in the telephone case. We did
11 not do anything about it early in the century, and
12 therefore, we had a raft of problems to deal with
13 beginning in the 1940s and later.

14 There are some puzzles here. There is one that
15 I really think the FTC or someone ought to study very
16 carefully, and that's Cisco. Cisco reached its dominant
17 position in the network switch business on the strength
18 of about 100 acquisitions and a lot of patent
19 acquisitions. Was that necessary? Would we have had
20 the best market structure for the switch industry if
21 antitrust had intervened against these mergers?

22 I remember one time being at a cocktail party in
23 Cambridge and meeting a gentleman who told -- you know
24 what you do at these cocktail parties, "What do you do?
25 What do I do?" He said, "Well, what I have done, I have

1 developed a switch that is a thousand times faster than
2 anything Cisco has." He ran a high-tech startup,
3 needless to say. I said, "What are you going to do with
4 it?" "Oh, we are going to exploit it. We are going to
5 market it." The next thing I know, he is bought by
6 Cisco for a couple of billion dollars.

7 Now, what would have happened if this guy had
8 been encouraged to develop the switch technology on his
9 own? These are interesting counterfactual questions
10 that ought to be explored carefully.

11 I pass on very briefly to the pricing
12 consequences of monopoly. It has to be brief, because
13 the theory and the evidence are extraordinarily complex.
14 It depends critically on entry barriers, broadly
15 defined, or cost structures. In particular, if entry
16 barriers are low, you have the paradox of explaining how
17 a firm achieved dominance despite having low entry
18 barriers.

19 The United States Steel case, decided by the
20 Supreme Court in 1920, bears careful examination. The
21 evidence is very clear. The Bureau of Corporations did
22 a superb job studying that industry. U.S. Steel had no
23 cost advantage over its rivals after the Carnegie
24 properties had settled into normality. So, it had no
25 cost advantage. How could it preserve its dominant

1 position? Well, the answer is it could not, and so it
2 chose an umbrella pricing strategy. It set prices high
3 enough to provide nice profits for everybody in the
4 industry. That encouraged a flood of entry, and
5 gradually, U.S. Steel's market share declined, which the
6 Supreme Court saw as evidence of effective competition,
7 the declining market share.

8 In fact, what it was evidence of was setting
9 prices monopolistically high above the entry-detering
10 level and behaving essentially sluggishly about entry,
11 and as a result, we have a steel industry that inherited
12 this tradition of sluggishness, of not responding to
13 price signals for 50 years until it got into big trouble
14 in the 1970s and 1980s.

15 Well, much more important than pricing is
16 technological innovation, much more important. There I
17 am clearly a "Schumpeterian." The question is, are
18 monopolists, are dominant firms, superior innovators?
19 The theory we have on this -- and we have got a lot of
20 it, and evidence, too -- the theory and evidence on this
21 say there's a duality. On the one hand there are
22 situations, situations mainly associated with
23 slow-moving technologies, where the science base is
24 changing slowly. There are situations where a
25 monopolist will, in fact, be a superior innovator, where

1 only a monopolist is able reasonably quickly to realize
2 sufficient quasi-rents to cover the R&D cost. Those
3 cases definitely do exist in small markets and markets
4 where the science base is moving slowly.

5 But there's an exception when the science and
6 technology base is moving rapidly, where you have
7 revolutions, the kind of revolution we have had in
8 information technology in the last few decades, where
9 that is happening, and/or when monopolists are reluctant
10 to cannibalize the rents that they are earning on the
11 products that they already have marketed. In those
12 cases, firms in dominant positions are almost surely
13 sluggish innovators. I say "almost surely" because
14 here, too, one can find exceptions.

15 The most interesting exception in recent years I
16 think has been Intel. Andy Grove's book *Only the
17 Paranoid Survive* is a really nice example. I
18 participated for the FTC in the case against Intel and
19 read all of Andy Grove's memoranda for several years.
20 Intel was really terribly alert to new technological
21 challenges and tried hard to stay abreast of them and
22 not be out-competed by upstart innovators. Even so, the
23 record is quite interesting. I do not have a slide
24 projector, and I did not bring a slide anyway -- I
25 forgot to bring it, it was the most important slide I

1 was going to bring with me, and I forgot to put it in my
2 portfolio --

3 COMMISSIONER KOVACIC: We have a sketch artist
4 in the back.

5 DR. SCHERER: No, I will wave my arms so you can
6 see. I did a graph, this was in the FTC's Intel case,
7 from public data. I had a graph on which time was the
8 horizontal axis, and on the vertical axis was the speed
9 of microprocessors, and what one sees is two things.

10 First of all, in the period when Intel had a
11 monopoly, at least in 32-bit chips, where Intel had a
12 monopoly, the trajectory introducing speed improvements
13 was like this, quite gradual, but then AMD and then
14 Cyrix caught up and got into the 32-bit technology and
15 began competing with Intel, and what you see, that slope
16 abruptly turns sharper. There was more rapid increase
17 in the key variable of competition, the speed of the
18 microprocessor, and one also found the individual new
19 product points more tightly clustered, showing that more
20 new products were being brought into the market as a
21 result of the competition from AMD and Cyrix.

22 Intel argued in the FTC's case that we are our
23 own best, sharpest competitors, because we have got all
24 this installed base out there, and we have to bring out
25 new products constantly or people will just stick with

1 their old microprocessors. I did a series of simulation
2 analyses, and what I found was that using reasonable
3 parameters, Intel would try to maintain a generation for
4 five or six years in the absence of competition. When
5 there was competition, however, it moved the speed of
6 the introduction process to two or three years.

7 Now, this blends into another aspect where you
8 really have serious problems for antitrust, and that is
9 the so-called fast second strategy. This is a concept
10 that was introduced in the late 1960s by Lee Baldwin
11 and -- I don't know his first name -- Childs, and there
12 has been a good deal of theoretical development on it
13 since. The basic idea is that the dominant firm holds
14 back until there is a real threat -- Andy Grove's Only
15 the Paranoid Survive -- and then when that threat
16 appears on the horizon, the dominant firm comes onto the
17 market with a new product, with all guns blazing, and
18 perhaps with a whole panoply of practices to make life
19 difficult for the new company. You can see them
20 described in the paper I submitted for the record, but
21 you clearly see this kind of conduct in Standard Oil, in
22 General Electric, in AT&T, in Xerox, in IBM, and in
23 Microsoft, you see at least delayed innovation, and for
24 IBM and Microsoft, a powerful fast second strategy.

25 How much time do I have?

1 MR. HEYER: You have got another ten minutes or
2 so.

3 DR. SCHERER: Oh, okay. Then I will read Judge
4 Jackson's -- I think it's the penultimate paragraph --

5 MR. HEYER: Five or ten minutes.

6 DR. SCHERER: -- in Judge Jackson's decision in
7 Microsoft.

8 "Most harmful of all is the message that
9 Microsoft's actions have conveyed to every enterprise
10 with the potential to innovate in the computer industry.
11 Through its conduct toward Netscape, IBM, Compaq, Intel
12 and others, Microsoft has demonstrated that it will use
13 its prodigious market power and immense profits to harm
14 any firm that insists on pursuing initiatives that could
15 intensify competition against one of Microsoft's core
16 products. Microsoft's past success in hurting such
17 companies and stifling innovation deters investment in
18 technologies and businesses that exhibit the potential
19 to threaten Microsoft. The ultimate result is that some
20 innovations that would truly benefit consumers never
21 occur for the sole reason that they do not coincide with
22 Microsoft's self-interest."

23 Well, Intel pursued similar policies. Actually,
24 the truth is more nuanced than what Judge Jackson said.
25 What he said was basically right, but recognizing this,

1 firms that had to compete with Microsoft or had to
2 compete with Intel pursued more sophisticated
3 strategies. Sometimes they simply tried to avoid areas
4 of dominant firm strategic interest, and therefore, we
5 may have missed significant innovations. We will never
6 know what we have missed.

7 But in other cases -- and I think this is the
8 larger majority of cases -- what they did was made their
9 appearance on the scene and then made it clear that they
10 really would like to be acquired by the dominant firm at
11 a very hefty price, and here we face a tough
12 counterfactual question. Would technological progress
13 be faster if they had seen their way clear to innovate
14 independently rather than having their operations taken
15 over by the dominant firm?

16 Now, my own view is that open competition is
17 clearly superior in inducing vigorous innovation as
18 compared to situations in which one has a relatively
19 secure dominant firm. The presumption of antitrust
20 should be to err on the side of maintaining competition
21 and especially, especially keeping both conduct
22 barriers, including fast second strategies, and
23 structural barriers at minimum feasible levels. This is
24 hard. There is no way to evaluate such situations
25 without a careful rule of reason analysis guided by

1 appropriate economic theory. But when monopoly
2 positions exist, the job can be done, and it should be
3 done.

4 At this, I will stop and will be happy to take
5 questions. Thank you.

6 (Applause.)

7 MR. HEYER: I think what we are going to do is
8 we are going to hold off on questions until we get into
9 the post-break round table discussion. We will let each
10 of the panelists go.

11 Let me say a few words about Luke, eager to get
12 up here. Luke has a very long title. He teaches at
13 Vanderbilt. He is particularly proud of his work
14 recently at the Federal Trade Commission, and I am happy
15 to say I know Luke back from when he was a staff
16 economist at the Antitrust Division. Despite his work
17 there, he became chief economist at the Federal Trade
18 Commission.

19 With no further adieu, we can --

20 DR. FROEB: Can we bring up the slides?

21 MR. HEYER: Actually, these aren't Luke's. All
22 right.

23 DR. FROEB: Thank you. It's a pleasure to be
24 here. Every time I go in and out of academia, I get
25 more discouraged about what we are doing in academia.

1 We work hard on problems no one cares about and publish
2 results in journals that nobody reads, and so it is a
3 delight to be back here working and thinking about
4 important problems that people care about.

5 This area is the source of the biggest policy
6 disagreement between the U.S. and the rest of the world.
7 The U.S. is relatively permissive towards single-firm
8 conduct, while the rest of the world is not. We have
9 reached agreement, by and large, on how to analyze
10 price-fixing and merger cases. And while we do have
11 differences about individual cases and evidence, we do
12 agree on the analytical framework.

13 There is no such agreement on single-firm
14 conduct, and why do we have this disagreement? What do
15 we really know about single-firm conduct? But more
16 importantly, do we know what we don't know about
17 single-firm conduct, and the message of this talk, there
18 is a lot of stuff we do not know, and I think we have
19 got to be really careful about policy in this area.

20 Before I start, I want to thank those who have
21 contributed to my thinking in this area. I thought I
22 would stop taking credit for other people's work once I
23 left the FTC, but apparently not for a couple more
24 years.

25 Okay, so why is horizontal merger analysis

1 easier than vertical? The biggest reason is we ignore
2 the long-run indirect and strategic effects of
3 horizontal mergers. We focus solely on the short-run
4 increases in market power, and we have relatively good
5 understanding of how that occurs. Most disagreements
6 focus on the magnitude of the effect and how to estimate
7 it. In other words, we disagree about the evidence, but
8 not on the analysis.

9 The second reason is that we have these distinct
10 mechanisms through which mergers affect consumer
11 welfare: unilateral effects, entry, product
12 repositioning, efficiencies, and coordinated effects.
13 I think we know less about coordinated effects than we
14 want to, but the other mechanisms are well understood.
15 To analyze cases, we gather evidence on each mechanism,
16 and estimate the net effect by estimating the magnitude
17 and likelihood of each individual mechanism.

18 So, why is analyzing single-firm conduct harder?
19 Well, we are concerned about long-run, indirect
20 strategic effects. We just cannot ignore them. If we
21 did, we would have a very simple analysis. And the
22 second reason is that mechanisms with opposing effects
23 usually appear in a single kind of behavior. Predation
24 is the simplest example. In the short run, firms reduce
25 price, but in the long run, we get fewer competitors.

1 Vertical integration has the same problem. In
2 the short run, we have the unilateral effect of vertical
3 integration where firms eliminate the double
4 marginalization. But in the long run, we might have a
5 raising-rivals'-costs or reducing-rivals'-revenue
6 mechanism.

7 Exclusive dealing, again, has two opposing
8 mechanisms. The immediate effect of exclusive dealing
9 is to reduce consumer choice, but indirectly, exclusive
10 dealing serves to align the incentives of the retailer
11 with the goals of the manufacturer. So, balancing these
12 effects is really, really difficult. They appear
13 together, and we do not really have good ways of
14 balancing them.

15 So, for these three reasons, single-firm conduct
16 is hard to analyze. There is a taxonomy that I borrowed
17 from Tim Brennan that says, let's consider the simplest
18 case where we have some kind of behavior that has only
19 two effects, two mechanisms at work. There is a
20 proximate, immediate, direct, short-run mechanism that
21 we may know something about, but the effects of the
22 distant mechanism are much less certain.

23 There are four possible outcomes, the distant
24 mechanisms and the proximate mechanisms can both be good
25 or bad. Those are the relatively easy cases. Where we

1 run into problems is when the mechanisms work in
2 opposing ways, where the distant mechanism can be bad or
3 good and the proximate mechanism has the opposite sign.

4 When you are doing single-firm analysis,
5 evidence determines which box you go in, and most of the
6 kind of behavior we are concerned about goes in either
7 the off-diagonal boxes. The good-bad box and the
8 bad-good box, those are the ones where we run into
9 problems. Most of the problem cases fall into the lower
10 left box where we have a distant bad and a proximate
11 good, and you can think about bundling, as an example.

12 Bundling offers consumers a better price for the
13 bundle. That is why they buy the bundle, and they are
14 better. But in the long run, the bundle may exclude
15 competitors, and that may have a negative long-run
16 effect. I have already talked about vertical
17 integration, but loyalty discounts and predation give
18 rise to the same kinds of problems.

19 So, how do we characterize the different
20 regimes? The big difference between the U.S. and the
21 rest of the world is that we disagree on the distant
22 effects of mechanisms, i.e., what is the magnitude of
23 these distant effects and how frequently do they occur?

24 The Europeans are much more concerned with the
25 long-run negative effects of things like bundling and

1 predation and loyalty discounts, and so they are
2 concerned with avoiding type II errors. If regulatory
3 agencies are uncertain about the effects of single-firm
4 behavior, they are going to make mistakes. They will
5 either deter behavior which is good, type I error, or
6 let bad behavior go through, type II error. And there
7 is an inevitable trade-off: The only way you can reduce
8 type I error is to increase type II error and vice
9 versa.

10 The U.S. regime is more concerned with type I
11 errors. We are more concerned with deterring good
12 behavior. So, we tend to regulate less aggressively.
13 Europeans are more concerned with type II errors, so
14 they regulate more aggressively. We cannot determine
15 who has the better regime, but we can say that relative
16 to the U.S., the Europeans commit more type I errors;
17 and relative to the Europeans, we commit more type II
18 errors.

19 The "makes no business sense" standard is really
20 about trying to find cases in that box so we do not
21 deter any good behavior. We miss more bad behavior than
22 the Europeans; but they deter more good behavior than
23 we.

24 So, the interesting question and the focus of
25 this hearing is, how do we determine the effects? Mike

1 correctly states that the effect question is a difficult
2 counterfactual. How do we know what would have happened
3 had a firm behaved differently?

4 This requires comparing two states of the world,
5 only one of which we observe. That is what Mike means
6 about the counterfactual. We have to figure out what
7 would have happened had the firm behaved differently.

8 There are two ways to do it. You can construct
9 a theory that describes competition, and use that theory
10 to tell me what would have happened had the firm behaved
11 differently.

12 The other way is to use what we call natural
13 experiments, and this is really a misnomer. Any
14 statistician in the audience will cringe when I use the
15 word "experiment," because there is nothing experimental
16 about economics data. We do not get to run experiments
17 with the economy, probably for good reason.

18 When I talk about natural experiments, I am
19 talking about comparing a market with the behavior to a
20 market without the behavior, and drawing inference about
21 the effect of the behavior by comparing those two
22 markets. The big questions here are how well does the
23 experiment mimic the effect of interest; and did we hold
24 everything else constant that could have accounted for
25 change. These are tough questions to answer.

1 We would particularly want to draw inference
2 about the distant, long-run, or strategic effects,
3 because we know less about them, and because uncertainty
4 about their effects is the source of conflict between
5 policy-makers, attorneys, and economists. I hate to be
6 so hackneyed, but we need more information; we need more
7 research. However, do we have natural experiments that
8 estimate the effects of these distant effects?

9 Here is my favorite study. It is from a paper
10 by Mike Vita of the FTC, and it estimates what happened
11 when the appeals court overturned the must-carry
12 regulations for cable TV. Local cable TV monopolists
13 must carry local over-the-air broadcast channels, and in
14 close areas like Baltimore/Washington, they must carry
15 both the Baltimore and the D.C. stations. When the
16 Court overturned those regulations, which stations did
17 the cable TV monopolist drop?

18 Would the Baltimore cable system drop the
19 Baltimore over-the-air broadcast stations which compete
20 for audience share and advertising revenue, or would
21 they drop the Washington over-the-air stations where
22 they do not compete and can get the same content? And
23 Mike found that they dropped the channels that had the
24 lower rating, and these tended to be the competitors.
25 Competitors were less likely to be dropped, and Mike

1 interprets this as evidence refuting the anticompetitive
2 hypothesis. He found that in the long run a firm will
3 not exclude its competitors, as long as they are
4 carrying a good product. I thought it was a very clever
5 kind of use of the decision to try to draw inference
6 about these long-run distant effects.

7 Another Whinston natural experiment is Indiana's
8 ban on exclusive territories for beer distributors.
9 After a state law banned exclusive territories, beer
10 consumption fell by 6 percent. Here again, the author
11 concludes exclusive territories were pro-competitive.

12 Other experiments show that gasoline prices are
13 3 cents higher in states where refiners are prohibited
14 from owning their own gas stations. For fast food,
15 prices at company-owned stores are 3 percent lower.
16 Another experiment which is pretty messy, and I have
17 given this talk over in the UK, and they fight me on
18 this one, on the banning of tied pubs -- so if you are a
19 beer manufacturer, you can't own your own pub to
20 exclusively promote your own -- you have to carry at
21 least two brands of beer. Small beer manufacturers
22 liked having their own pubs because they were using them
23 to promote their beer, and they thought it was an
24 effective way of competing against large brewers. And
25 once they got rid of tied pubs, price went up and

1 quantity went down. However, there were a lot of other
2 changes that were going on at the same time, so it is a
3 hard experiment to interpret. But more telling was that
4 the small beer manufacturers fought the change. They
5 liked being able to own their own tied pubs and to have
6 exclusives with a pub so they could promote their
7 brands, and sure enough, the small -- the small beer
8 manufacturers were hurt by the change.

9 At the same time that we were reviewing the
10 literature, Francine Lafontaine, who knows more about
11 franchise agreements than I, and Margaret Slade, who
12 used to be at the FTC and is now in the UK, were
13 reviewing the literature as well, and they used a
14 different taxonomy than we did. We were trying to
15 determine what can we learn about these distant effects,
16 but they were looking at government-imposed changes
17 versus voluntary changes, and they looked at a lot of
18 the same studies that we did. Here is their conclusion:

19 When manufacturers impose restraints, not only
20 do they make themselves better off, but they also
21 typically allow consumers to benefit from higher quality
22 products and better service provisions. In contrast,
23 when the Government prevents these kinds of contracts,
24 the effort is typically to reduce consumer welfare as
25 prices increase and service levels fall. And they

1 conclude that the interests of manufacturers and
2 consumer welfare are apt to be aligned, while
3 interference in the market is accomplished at the
4 expense of consumers, and, of course, manufacturers.

5 I would interpret this as evidence that these
6 kinds of arrangements are doing what we want them to do,
7 which is the U.S.'s relatively lenient attitude toward
8 single-firm behavior relative to the rest of the world.
9 I do realize there is a lot that we do not know, and I
10 think it is important to recognize that there is much we
11 do not know.

12 More importantly, how do we generalize these
13 studies to cases? I am not naive enough to think that
14 in a litigation context we are going to have a nice
15 natural experiment that we can interpret cleanly to tell
16 us what to do in a specific case. However, I am not
17 sure how frequently we have been looking for experiments
18 like these.

19 I am much less sanguine than Professor Scherer
20 that we know that much about innovation. So, you look
21 at the Intel innovation, who knows what the innovation
22 rates would have been had we had more people in there?
23 Maybe there was room for only one firm in the market?
24 It is a really tough counterfactual. I wish we knew
25 more.

1 And finally, how do we test for the effects of
2 antitrust intervention? Bill Kovacic has been a real
3 advocate for what he calls competition R&D. When we go
4 around the world and talk to new antitrust regimes, we
5 say, look, don't just adopt a regime and freeze it,
6 because what if you get it wrong? Instead, build in
7 some kind of feedback mechanism, and start with the kind
8 of follow-up studies that are done at the FTC and DOJ.
9 I think they are absolutely crucial to try to
10 characterize what are we doing, and to try to figure out
11 what would have happened had we done something
12 differently, in hope of improving.

13 So, characterizing what we do and determining
14 what its effects are really tough, but there are some
15 instances where we can figure out what is going on, and
16 I think we have to be on the lookout for good natural
17 experiments.

18 I guess that is all I want to say.

19 MR. HEYER: Thank you.

20 (Applause.)

21 MR. HEYER: Okay, our final panelist presenter
22 pre-break is Professor Wally Mullin. You have got his
23 bio. He is a professor at George Washington University,
24 and particularly of interest to us I think here is that
25 he has done a fair amount of empirical work on some of

1 the issues we are trying to grapple with. A lot of us
2 have a lot to say about theory, but he has gotten his
3 hands dirty a bit, and we look forward to his remarks.

4 DR. MULLIN: Thanks. I am delighted to have
5 this opportunity to appear in these public hearings, and
6 I thank the Department of Justice and the Federal Trade
7 Commission for jointly sponsoring these hearings and, of
8 course, in particular, the co-moderators today, Ken
9 Heyer and Bill Kovacic.

10 So, switching gears, today I want to talk about
11 what lessons we can draw from the history of antitrust
12 enforcement, okay? Now, these may very well be lessons
13 that are kind of in the DNA of current antitrust
14 enforcers, but in the interest of redundancy, I am going
15 to include some of those lessons as well.

16 So, the initial set of dominant firms arose out
17 of the trust movement in the sort of merger to monopoly
18 way. So, in saying that this should be an area of
19 contemporary interest, you know, I certainly acknowledge
20 that similar economic and legal conditions may never
21 return; however, the historical emphasis can still
22 provide a modern researcher with a relatively large
23 sample of dominant firms which faced antitrust scrutiny.
24 So, as an empirical economist, that is very attractive.

25 So, I am going to focus in the discussion today,

1 in part, as reflected in my own work, on an admittedly
2 non-random sample of these firms, okay, Standard Oil,
3 U.S. Steel, which Mike has already talked about a little
4 bit, and American Sugar Refining Corporation. So, this
5 choice arises out of a variety of factors. One is sort
6 of the economic importance of the firms, you know, at
7 that particular time, the legal significance of the
8 associated antitrust decisions, and to some extent the
9 similarity and differences in their business strategies.

10 In work with co-authors, I have studied two of
11 these firms. I haven't published any work on Standard
12 Oil, but other people here have, and obviously it's a
13 well-known case in terms of monopolization law.

14 So, since all three firms faced antitrust
15 prosecution, we can examine not only dominant firm
16 behavior, but also the effects of prosecution, and we
17 can also study the effects of remedy as implemented or,
18 admittedly, more speculatively, consider the effects of
19 remedies that were not ordered, because in some cases no
20 liability was found.

21 So, let's start with Standard Oil. My remarks
22 on this will be relatively brief, reflecting sort of
23 comparative advantage issues. So, Standard Oil, right,
24 if we want to have a poster child for different types of
25 dominant firms, Standard Oil was an aggressive

1 competitor, okay? So, while the claim that Standard Oil
2 engaged in predatory pricing has been debunked by McGee,
3 the company had other practices that still marked it as
4 an aggressive competitor. For example, Granitz and
5 Klein in 1996 published an article studying how Standard
6 Oil obtained differential rebates from the railroads on
7 petroleum transportation, and that is a source,
8 according to Granitz and Klein, of their sort of
9 supra-competitive rents, and those rebates, of course,
10 advantaged it relative to other refiners.

11 Of course, Standard Oil was found guilty and
12 dissolution was ordered, and it was kind of alluded to
13 by Mike, Bill Comanor and he have argued in a paper that
14 dissolution of Standard Oil raised long-term industry
15 performance, and also in that paper, this is
16 counterfactual, it would have been good had U.S. Steel
17 been dissolved.

18 In his academic work, Bill Kovacic has argued
19 that the effect of this dissolution rests in part on the
20 fact that the dissolution involved formerly independent
21 entities. So, one shouldn't necessarily take this as a
22 dissolution child's story in which everyone lives
23 happily ever after as an automatic indication that
24 structural remedies in all forms and in all
25 circumstances will work. You have to be sensitive to

1 the particular facts involved, but given the fact that
2 Standard Oil was organized as such that what was spun
3 off were things that were in some sense formerly
4 independent or had a certain amount of autonomy within
5 Standard Oil in terms of decision-making, in terms of
6 things like corporate culture, the enterprise was able
7 to grow and prosper going forward, and so my take-away
8 would be that, you know, a different remedy in another
9 industry or even with a firm with a different internal
10 organization and history might have unduly sacrificed
11 production costs, but that is merely a speculative
12 comment with a note of caution.

13 So, in terms of U.S. Steel, Mike has already
14 touched upon part of this. So, you know, John D.
15 Rockefeller and Standard Oil is the poster child for the
16 aggressive competitor. United States Steel is sort of a
17 poster child for a dominant firm that may be good for
18 competitors and bad for competition, which was something
19 that the Supreme Court didn't realize at the time.

20 So, in published work with co-author brothers,
21 and it's otherwise hard to find two other Mullins, we
22 have presented evidence that dissolution, which, of
23 course, was never ordered, would have lowered steel
24 prices in that case, in particular, and raised steel
25 output. So, in particular, the pattern of

1 contemporaneous stock market reactions to events from
2 the dissolution suit, okay, basically from 1911 to 1920,
3 not only judicial decisions but periods when it was
4 rumored U.S. Steel might dissolve itself to basically
5 avoid prosecution, and then a denial of that rumor the
6 next week, some subset of the events that I mentioned
7 ended up having big stock market reactions for U.S.
8 Steel, indicating that there was news sent to the
9 securities markets in those particular events, and in
10 those weeks, the stocks of customers, in particular, of
11 U.S. Steel, particularly the railroads, reacted in a way
12 that suggested that the stock market believed that
13 dissolution would have lowered steel prices.

14 So, interestingly -- and this is a bit in
15 contrast to maybe what Mike Scherer was talking about --
16 one of the things I also find of interest, and this is
17 part of the tension of monopolization law, is that there
18 are parts, going back to things that might have
19 potentially been sources of market power, that
20 contemporary scholarship would suggest maybe were, in
21 fact, efficiency-enhancing. So, in particular, U.S.
22 Steel was losing market share over time, and you might
23 think, well, wait a minute, is there some sort of scarce
24 factor upstream from steel production that they could
25 use and acquire in order to foreclose entry, you know,

1 or at least put a limit on that, right?

2 So, historically they were vertically integrated
3 into iron ore properties, as the Carnegie properties had
4 been, and during the period where they were undergoing
5 antitrust scrutiny at the start of the 20th Century,
6 they added to that a significant amount by long-term
7 leasing the iron ore properties of the Great Northern
8 Railway and James J. Hill. So, that is why they are
9 referred to as the Hill properties. And that was viewed
10 as anticompetitive by contemporary antitrust authorities
11 for some reason, as I will sort of talk about in the
12 next slide, but that is not only criticized by the
13 standing Congressional Committees -- the Federal Trade
14 Commission wasn't around at the time -- but the Bureau
15 of Corporation's report criticized it, and, in fact,
16 U.S. Steel ends up cancelling the lease in 1911 in part
17 to try to forestall prosecution because this was that
18 big of deal to the Department of Justice at the time.

19 Okay, so what might be some of the lessons we
20 take from there? So, as before, of course, the law
21 should protect competition, not competitors. You know,
22 it strikes me -- as I said, I recognize that this would
23 be known by the contemporary court, but it is a good
24 case to assign students, because you have them read the
25 case, and, of course, the Supreme Court is praising U.S.

1 Steel because its competitors had such nice things to
2 say about it at trial, and the contrast with Standard
3 Oil is pretty stark. U.S. Steel's anticompetitive
4 effect is not only due to single-firm conduct in a
5 narrow sense, but U.S. Steel's actions in organizing the
6 Gary dinners, which it later abandoned, clearly had a
7 collusive intent, and they were also bad for
8 competition, although good for competitors.

9 So, another tension of monopolization law is
10 that even a firm with market power may have
11 efficiency-enhancing innovations, right? So, the easy
12 case would be in which, you know, if you wanted to do
13 some variation of the diagram, the easy case would be,
14 oh, there are firms that have market power and there are
15 firms that have cost reductions, and they are completely
16 disjoint. I say empirically, that is not the case. In
17 fact, in terms of work that we have done, U.S. Steel was
18 a firm with both elements.

19 So, in a paper with one of my brother
20 co-authors, okay, we didn't have a falling out over the
21 difference in these papers, orthogonal to that issue,
22 the paper with Joe Mullin examines the Hill ore lease,
23 and says that, on balance, that it seems to be best
24 explained as being efficiency-enhancing rather than as
25 vertical foreclosure.

1 There are several reasons for this. So, if you
2 sort of back up, the underlying problem of developing an
3 iron ore mine is a problem of relationship-specific
4 investment, something that was studied later by
5 transaction cost economics, both for kind of developing
6 the mine or the investment in the mine, which, of
7 course, is not mobile once it is sunk, and also
8 development of transportation to get the ore or some
9 variation of the ore to market, and that transportation,
10 given where those mines were, was over the Great
11 Northern Railway, which otherwise would have owned the
12 mining rights.

13 So, the specific contractual terms that were in
14 the lease, which caused the Bureau of Corporations to
15 scratch its head circa 1906, has been studied by people
16 like Crocker and Masten. So, one example of this is
17 they had a take-or-pay provision which was quite large,
18 so U.S. Steel was basically committed to making these
19 large payments, and, in fact, during the initial period
20 of the execution of the lease before it fell under
21 antitrust scrutiny, they were, in fact, investing --
22 they were basically scaling up to exploit that property
23 at a very high level.

24 And it's striking, also, in the sense that you
25 might imagine some notion of vertical foreclosure or

1 barrier to entry would be, oh, well, they are going to
2 acquire this iron ore. They have other iron ores. They
3 don't need to exploit it to produce right now. They are
4 just going to sit on it and prevent anyone else from
5 gaining entry to it, but, in fact, they invested heavily
6 in trying to exploit the iron ore.

7 It is possible, of course, it had an
8 anticompetitive effect, so it is not so much a -- you
9 know, a complete nesting of the hypotheses, but rather,
10 sort of saying, our judgment, my judgment, the bulk of
11 the evidence would be that that particular aspect of
12 their innovation was something that was
13 efficiency-enhancing.

14 And, of course, the challenge for contemporary
15 antitrust enforcers is what sort of humility should they
16 exercise when faced with some sort of business practice
17 that they don't automatically have an obvious efficiency
18 explanation for? Now, obviously the staff and other
19 people are going to be aware of transaction cost work,
20 et cetera, right, but presumably, we will figure out 20
21 years from now other reasons why some firms might have
22 some sort of purpose. That doesn't necessarily mean
23 that the behavior is necessarily benign, but that's the
24 situation that requires the people to look at it.

25 So, finally, love of my life, American Sugar

1 Refining. So, David Genesove and I have written a
2 series of paper on this. This is one of those things
3 that you don't necessarily know what you're getting into
4 when you start. So, in a paper that recently appeared
5 in the Rand Journal, they profitably engaged in
6 predatory pricing, and that was one of their business
7 practices.

8 Now, these joint hearings have already included
9 a rich discussion of predatory pricing in an earlier
10 session, so I won't recapitulate that now. We might get
11 into some element of that in the discussion. David and
12 I noted in the paper that compelling evidence of
13 predation is rare. That is reflected not only in the
14 academic consensus, but obviously also in the case law,
15 but we think the evidence that we present in the paper
16 in this case is compelling.

17 So, in terms of a couple of things to point out,
18 American Sugar engaged in predation. They didn't prey
19 on all entrants. Every single entry episode didn't
20 trigger predation or didn't trigger immediate predation;
21 however, the nature of the market was such that after
22 they preyed, they acquired the entrants and other fringe
23 firms at lower buy-out prices. So, in a sense, if they
24 were making the dynamic calculation, they were sort of
25 saying, well, here's some small firm, it's entering, you

1 know, no big deal. As more firms enter, they are sort
2 of like, okay, well, now it's time to prey and buy
3 people out and raise up our market share.

4 In terms of trying to rationalize the
5 observations under different theories of business
6 behavior, that manipulation of rivals' beliefs played a
7 very big role as in some of the reputation models. So,
8 once again, it is not as if they sent out a clarion call
9 saying that, oh, they were going to prey and then they
10 were going to buy people out, so, in fact -- precisely
11 because there were multiple firms they were basically
12 preying on simultaneously, there are cases in which they
13 basically made an arrangement with one of the firms to
14 say, okay, well, fine, we are going to buy you out, here
15 are these terms, but let's keep this secret, and so --
16 and then continue the war, and then buy out the other
17 firms.

18 So, in some sense, part of the aspect of kind of
19 buying out firms and engaging in predation is that the
20 process is sort of the reverse of what we are calling
21 the free-rider problem when you form a trust, right? If
22 you form a trust, you are going to restrict output, and
23 so people will want to stay outside of it and just take
24 advantage of the output lowering entity.

25 Conversely, if there's predation going on, and

1 you know there will be a buy-out and the predatory
2 pricing is going to end, of course, people also want to
3 free-ride on that. So, the manipulation of rivals'
4 beliefs is I think part and parcel of being able to be
5 successful.

6 So, there was a monopolization suit, and it
7 stretched on over a period of time, that eventually
8 resulted in a consent decree. But there are some other
9 sort of, you know, maybe, you know, happy lessons here
10 that antitrust serves as a deterrent on a variety of
11 levels. Part of the rationale of the antitrust law is
12 to be punitive, but obviously you also want to think,
13 well, gee, you hope other firms get the message and we
14 don't have to go prosecute them, or this firm in the
15 future, once bitten, twice shy, and so will behave
16 better, and have some sort of implicit consent decree.

17 So, there are two examples of this, and one
18 deals with American Sugar and one deals with other
19 firms. So, during its monopolization case, American
20 Sugar underwent sort of partial "voluntary" dissolution,
21 so this was before the consent decree, because of the
22 government victories in the American Tobacco and
23 Standard Oil cases.

24 So, focusing on American Tobacco or Standard Oil
25 as cases, those basically had a spillover effect on the

1 behavior of another firm, in this case American Sugar,
2 and presumably other firms. The difficulty of the
3 non-random sample is, of course, it may be that the
4 whole universe of firms behaved differently, which is a
5 reason why people should do more work on it.

6 Later on, there is also an impact on American
7 Sugar itself. David Genesove and I also studied not a
8 single-firm conduct, but in terms of collusive conduct,
9 we studied The Sugar Institute of the twenties and
10 thirties, of which American Sugar was the largest and
11 most important member, but no longer as large as in 1911
12 or 1914.

13 So, this is noted in our AER paper, even though
14 it wasn't the focus of that paper, which was that the
15 legal representatives of American Sugar at these
16 basically collusive meetings within the industry were
17 very sensitive to things like discussion of price. That
18 was a part of the battle, in a sense, within The Sugar
19 Institute, one person complaining to his boss, oh, gee,
20 we are never allowed to do anything that's going to have
21 any real effect, and so that may just be the wise
22 counsel of American Sugar at the time, but one has to
23 think that the fact that they had had this antitrust
24 prosecution was something that empowered people within
25 the firm to say, okay, compliance is important. It is

1 certainly something you think that going forward would
2 be an important part of antitrust enforcement.

3 So, all I have for now.

4 (Applause.)

5 COMMISSIONER KOVACIC: Thanks, Wally.

6 I would now like to invite Jon Baker to present
7 his comments. Jon, as you know, like Mike and Luke, is
8 part of the galaxy of superb economists who have headed
9 the Bureau of Economics at the FTC. In addition to
10 Jon's affiliation with the Commission, in many ways he's
11 been what I consider to be hitting for the scholarly
12 cycle. Not only has he done excellent quantitative
13 work, both at the Commission in matters such as Staples,
14 but also, in his own published work, he has contributed
15 wonderfully to theory. In studying the deliberations
16 that took place over the Verizon-Twombly matter, I many
17 times went back and referred to Jon's paper on two
18 Sherman Act dilemmas from the early 1990s. And quite
19 apropos for this panel as well, Jon, like so many of our
20 presenters, has a good aptitude for history, reflected
21 not only in his survey paper in the JEP on competition
22 enforcement, but also in his recent paper in the
23 Antitrust Law Journal on the development of widely
24 accepted norms and standards, and his political
25 bargaining paper. We are delighted to have Jon here

1 today.

2 DR. BAKER: Thank you. Thank you, Bill. That
3 was a very nice introduction. It is not what I would
4 expect from a case book co-author, but I appreciate it
5 anyway.

6 COMMISSIONER KOVACIC: I should have added, he
7 is the co-author of the most astonishing and --

8 MR. HEYER: Copies on sale in the lobby.

9 COMMISSIONER KOVACIC: During the break, there
10 will be the signing process --

11 DR. BAKER: And I am always delighted to be back
12 to see all my former FTC and Justice Department
13 colleagues. I worked with Ken and Luke back in the old
14 days at the Antitrust Division.

15 Well, so let me -- I have a -- sort of several
16 comments on what we have heard this morning. They are a
17 little bit disjointed, and I will just get into them and
18 see how far we get.

19 The first is on the question of what can we
20 learn from the old monopolization cases. On the one
21 hand, there are very few of them. They are often high
22 profile, but there aren't many, and a lot of them were
23 reviewed when antitrust standards were very different
24 than they are today and when ideas about remedies were
25 different than they are today. I don't think we would

1 remedy the Standard Oil monopoly were that to have
2 appeared today anything like the way it was remedied
3 then. We would have tried to get the parts that were
4 broken up to engage in head-to-head competition from the
5 beginning.

6 So, there's something funny about this exercise.
7 The -- you wouldn't -- it's a little like saying, well,
8 what can we learn about merger analysis from studying
9 Pabst and Von's, you know, some poster children of
10 merger cases that are no longer thought to be good
11 precedents, although they are technically controlling
12 Supreme Court precedents, as an aside.

13 Well, what we learn from Mike Scherer and Wally
14 Mullin, I think, is something that perhaps we have
15 always known, which is the value of careful
16 case-specific analysis. This is what the judicial
17 system at its best makes possible.

18 Now, that's not to say that the courts have
19 always undertaken this -- the adversarial system has
20 always forced the same level of analysis that later
21 scholars have been able to bring to these cases. I
22 mean, it took 50 years, but the Mullin Brothers finally
23 got to the bottom of the U.S. Steel case. One would
24 like that to have happened, in the case itself. But on
25 the other hand, it shows you the power of case-specific

1 analysis to hear Mike and Wally go through what they
2 have learned about these cases.

3 That's not to say that their conclusions are
4 undisputable, but the kind of analysis they do, they can
5 focus in on the issues, and it really does support the
6 kind of work that we do in the enforcement agencies and
7 the courts.

8 Now, let me move on to say something about the
9 issues Luke raised. It struck me, one interesting point
10 is the short-term focus, Luke says, of our antitrust
11 thinking. He didn't quite put it this way, but I mean I
12 guess I'm a little -- I read it in the light of also
13 thinking about a paper that John Lopatka and Bill Page
14 wrote where they argued that antitrust enforcement
15 courts are more congenial to -- or the decisions, I
16 suppose you would say, the decisions are more driven by
17 the short-term benefits and costs than the long-term
18 ones.

19 If you take that perspective and think about
20 Luke's charts, it seems to me that one message is we
21 shouldn't just give a free pass to all those kind of
22 practices in the lower left box of Luke's taxonomy:
23 Price predation, bundling, vertical integration and
24 loyalty discounts. These are things where I think Luke
25 says the proximate effect is good and the distant effect

1 is bad.

2 Now, I suppose that my characterization of the
3 implication of those boxes is a little different from
4 Luke's, but in order to go beyond the picture Luke drew
5 to an enforcement regime that gives a free pass -- well,
6 free pass is a little strong -- but that makes it tough
7 to bring cases in the lower left-hand box, you have to
8 take another step in the logic. You have to argue, as
9 some people do, things like the Government can't do a
10 good job analyzing these practices, separating out the
11 two kinds of effects, and remedying it, and you have to
12 conclude that the costs of one type of error are greater
13 than the other. There's a whole additional apparatus
14 that we have to apply before we can reach the conclusion
15 that antitrust should be hands off on all these
16 practices.

17 In thinking about Luke's taxonomy a little more,
18 I started thinking about most favored customer clause
19 cases or most favored nation clause cases. The Justice
20 Department for a while had an enforcement program
21 involving dominant firms that instituted these kinds of
22 practices. It was a dominant health insurer that had a
23 most favored customer clause in its contracts with
24 healthcare providers, and I'm thinking of -- was it
25 Delta Dental, there's a bunch of Delta Dental cases, and

1 I think there's some other ones.

2 So, the idea was the provider, the doctor or the
3 dentist or whatever it was, wouldn't lower rates to
4 rival health insurers without also lowering it to the
5 dominant provider, let's call it Blue Cross, and so that
6 makes it impractical for the rivals or the entrants to
7 make procompetitive deals; that is, rivals to Blue
8 Cross. Insurers want to come in and say if you give me
9 lower rates, I'll funnel more business to you, the
10 provider, and we will both do better, and then this
11 creates competition for Blue Cross.

12 Of course, these most favored customer clause
13 provisions can also result in collusion by making
14 discounting more costly, but we are in the dominant firm
15 context here, so we will put that aside.

16 The interesting thing about these most favored
17 customer clauses as a practice is that there are
18 efficiency justifications that are often offered, but in
19 a health care setting, they are not very plausible. The
20 best efficiency justifications are either preventing
21 opportunism when futures markets are unavailable, which
22 sometimes happens in long-term contracting where you see
23 these kinds of provisions, or perhaps signaling low
24 prices where buyer search is costly, and these are the
25 kind of -- here, we're thinking there about retail

1 businesses selling to customers.

2 Perhaps Luke will say to me I just moved these
3 provisions in the health care context from his lower
4 left box to his upper left box, where the efficiency
5 justification isn't very good, and so there isn't a
6 problem, but I think if you accept what I have gotten to
7 so far, that these provisions can be troublesome for
8 dominant firms to contract using them in many of these
9 health care contexts, you have to ask, well, when we
10 move outside the health care context, perhaps to one
11 where the efficiency justification is potentially more
12 plausible, don't we have to analyze? Don't we have to
13 think about whether the bad guy story and the good guy
14 story -- which is more powerful as between the two? So,
15 my take from Luke's taxonomy is we ought to think hard
16 about practices in the lower left-hand box and analyze
17 them as best we can.

18 On natural experiments, Luke, I think you missed
19 an opportunity when you were talking about experiments.
20 I have a new motto for the FTC, and this really would be
21 your motto, not mine, "We fool around with the economy
22 every day." Natural experiments are fine in
23 principle -- that was just a joke -- natural experiments
24 are fine in principle, and I basically am sympathetic to
25 what Luke was trying to do with them.

1 Tim Bresnahan and I have a recent paper where we
2 talk about something similar. We say that a key
3 challenge for antitrust analysis and empirical
4 industrial organization economics going forward, which
5 is not recognized in antitrust to the same extent that
6 it's recognized in economics, is to exploit similarities
7 among related industries that focus an inquiry involving
8 the industry and the firms under study. We have some
9 examples different from Luke's, but I think the spirit
10 of the exercise is similar. An important question, even
11 assuming it's a good natural experiment, is what
12 generalization you can make from it.

13 Tim and I think that the right generalization is
14 the level of the industry. In other words, I would look
15 at some of the examples that Luke has about -- oh, I
16 don't know, gasoline divorcement or something like that,
17 but not -- and perhaps that would create a presumption
18 about gasoline retailing, but I wouldn't connect the
19 dots and generalize to all vertical restraints. All of
20 Luke's examples, for example, in his representative
21 studies are about manufacturer- distributor
22 relationships in consumer products. They do not tell us
23 much about most favored customer clauses, for example,
24 in health insurer contracts with providers.

25 Finally -- I am not sure how much time I have

1 left. Do I have time left? Okay.

2 MR. HEYER: Is it good?

3 DR. BAKER: It's not as good as what's happened
4 already, Ken. I don't get better.

5 No, I think I'll just stop right there, and I
6 will -- it's not that good, Ken.

7 MR. HEYER: Save it for the discussion, all
8 right.

9 DR. BAKER: We will save it for the discussion.
10 Thank you.

11 (Applause.)

12 MR. HEYER: The final person we are going to
13 hear from before the break is Cliff Winston, who you'll
14 see is a long-time economist at The Brookings
15 Institution and has done just an incredible amount of
16 empirical work, largely having to do with regulated
17 industries but not exclusively, and partly because he's
18 really taken on some tough challenges empirically, he
19 seems like a perfect person to invite to talk here, and
20 let's just hear from Cliff.

21 DR. WINSTON: Thanks a lot for inviting me to
22 this conference.

23 Let me, since I'm a little bit on the fringe in
24 this enterprise, sort of tell you my context and how I
25 was thinking about this and eventually how I synthesized

1 what we have heard.

2 When Jim Taronji called me about this, my sort
3 of immediate perception was you were planning a series
4 of conferences that were basically assessing the
5 antitrust activity at the federal level of DOJ and FTC,
6 and I naturally thought this, and it turns out that -- I
7 had just finished a book called Government Failure verse
8 Market Failure that looks at all areas where the
9 government intervenes in trying to correct market
10 failures, including but certainly not limited to market
11 power, but information problems, externalities, public
12 good, public production and the like, and figured, well,
13 this is right along the lines of what I have just
14 written up, and so I can sort of look at what you're
15 doing from this perspective.

16 But I also pointed out that I was going to be
17 away a couple of weeks before the conference and
18 literally just got back late the night before, so it
19 would be good if I got the presentations beforehand.
20 Otherwise, you know, I would have to be on the fly, but
21 I thought there obviously might be difficulties in
22 getting things to me, and I was checking my web when I
23 was in Europe, but late last night, I realized a couple
24 had come in, but unfortunately one was in WordPerfect,
25 and Brookings doesn't use WordPerfect. I assume Mike

1 does this as a protest against Microsoft. I like
2 WordPerfect better. So, I didn't have them, but I did
3 have a fall-back position.

4 What I was going to do was sort of outline a
5 template, in general, about how I would assess the
6 performance of a federal agency and what recommendations
7 that I might make in terms of improving performance, set
8 that up, say, okay, and I'll just plug in everything I
9 hear in these areas.

10 So, let me outline the template and then just
11 make a few comments on what we've heard. So, the first
12 thing in general that I would ask and think about for
13 any federal agency is, is there compelling evidence of a
14 problem to begin with? That is, you know, are there
15 some stylized facts, summary measures of welfare, you
16 know, that something is going on, you know, information
17 problems are costing consumers hundreds of millions of
18 dollars a year, monopoly is causing similar kinds of
19 costs?

20 Okay, the first thing, just get a big picture
21 overview, when I do these things with transportation, it
22 is very easy, because I can just point to graphs of the
23 lake, there is a problem, congestion going on, airline
24 delay, going up, there's a problem, not too much
25 controversy about that.

1 The second question one would ask, you know,
2 what is the scholarly evidence -- when I mean the
3 scholarly evidence, I mean quantitative, welfare type
4 calculations, and certainly counterfactuals isolating
5 the effects of other factors, on first market failure,
6 what do we know about how markets are performing or not
7 performing, since they may be the source of the problem,
8 and government failure, that is, how are governments
9 doing in all of this, and third, government success.
10 So, you know, here are the things you want to look at
11 from the bottom up, the little pieces of evidence that
12 we look at to assess the agency.

13 Then the third thing, since this really is a
14 scholarly enterprise, when I ask the big picture
15 question, where is the field going? You know, since
16 we're getting a lot of the intellectual infrastructure
17 from the scholars who work in the area, how does the
18 field look at this problem? What kind of research are
19 they doing? Where are they likely to help in the
20 future, if at all? Are there incentives the agency
21 could give to researchers to sort of get them focused on
22 problems that they are interested in, so on and so
23 forth?

24 And then finally, you know, given one, two and
25 three, where do we go from here? How do we put all this

1 together and say, okay, here is how I think you can
2 improve your performance and your interventions, or here
3 is what I think we, you know, we need to know before we
4 can give confident recommendations.

5 So, let me go through these now with an eye
6 toward what has been said and what has not been said
7 about them. Okay, first, the big picture question, I
8 didn't really hear exactly what I was looking for there,
9 but there's a reason. It's really hard. They are
10 trying -- and I think it is one of the big problems --
11 maybe the biggest problem with industrial organization,
12 is unlike other fields in economics, there isn't this
13 stylized fact that you're constantly facing that reminds
14 you of what's going on out there.

15 It's not like in labor economics where you hear
16 about what the unemployment rate is, okay, or the
17 percent of people below the poverty line. You hear
18 these numbers, you know, these are the kinds of things
19 that researchers get to work on in dealing with this.
20 It is not like trade where we hear what's going on with
21 the dollar, the trade balance. Recently, it just came
22 out about we now have sort of have negative net capital
23 funds, I assure you now a lot of paper is going to come
24 out about this, trying to explain it to us, what is
25 going on, so on and so forth. You can think of a whole

1 bunch of things, but when you talk about IO, yes, your
2 instincts are well, we want some measure of economic
3 welfare, but that's not presented by the Commerce
4 Department. It's hard to construct that kind of thing.

5 Now, that said, there was an effort to do that.
6 In the sixties, there was a lot of effort to think of
7 things in terms of concentration ratios, and that was
8 sort of our stylized fact, and there was even a
9 Commission, the Neal Commission, you know, that met and
10 made recommendations about, you know, deconcentration of
11 industries that exceeded a 70 percent level of
12 concentration, and that may not be something that people
13 take seriously today, but there was a time when that was
14 sort of an orientation towards thinking about IO and
15 even antitrust policy, okay?

16 But there really isn't that, which is a bit of a
17 concern, because you never sort of know, well, are you
18 working on a problem that's really important? And the
19 only one who talked about that was Luke in terms of
20 motivating -- while we care about this, and he said this
21 in terms of, you know, apparent disagreement or I would
22 say just different approaches toward antitrust policy
23 between the U.S. and the EU, and I just simply say,
24 well, does that signify different concerns with the same
25 problem?

1 To the extent the U.S. is less aggressive and
2 more permissible and allows certain things to go on,
3 does it basically feel that competition is pretty
4 intense, and maybe this is just signifying we really
5 don't have that much of a problem, whereas in Europe,
6 they might feel that there is more, but this is
7 certainly something to think about.

8 Okay, secondly, the scholarly evidence on the
9 various issues, you know, first, looking at market
10 failure -- and I agree completely with Mike, it's an
11 excellent point, a point that is not made enough, that
12 too much of economists' orientation on market failure is
13 static inefficiencies, so price distortions and the
14 like, where so much of the big gains from policy
15 improvements are the dynamic ones, because that's the
16 counterfactual that you don't see.

17 So, if you look at what we've learned about
18 deregulation in terms of what regulation we're doing,
19 the big ticket effects were suppressing innovation,
20 right? So, there you get, you know, more than first
21 order effects. You get really big effects, you know,
22 shifts of cost curves as you completely change what
23 you're doing, shifts of demand curves where you provide
24 new products, okay? So, to the extent that a dominant
25 firm is working like a constrained regulatory policy,

1 you know, the effects can be big.

2 Now, that said, you know, measuring these things
3 are very difficult, and, you know, it's not clear to me
4 that we really have hard evidence on this kind of thing.
5 I think the anecdotes are informative, but it would be
6 nice if there was a really strong body of literature on
7 the dynamic effects of delayed innovation, so on and so
8 forth.

9 I would also add, though, just for balance, more
10 emphasis on the self-correcting nature of markets. All
11 the time you are listening to these firms, they are all
12 dinosaurs, right? Look what's happened to them all.
13 Mike mentioned U.S. Steel. Look what happened to them,
14 right? And it was foreign competition, the mini-mills,
15 right? I mean, look at the auto companies, you know,
16 look at Ford, GM, and it's amazing. You know, go on
17 down the line. Now, this does take time, but I think,
18 you know, it's important to keep in mind the
19 self-correcting nature of markets in all of this.

20 Along with that, then, is the parallel of
21 government failure. Now, there are parallels of all the
22 policies we're talking about. Antitrust is not made in
23 a vacuum. Everything that you're talking about
24 intersects a lot of major policies. Trade protection,
25 for example, right? You know, more often than not we

1 hear about, well, we need more competition in the
2 airline industry. Yes, let's allow cabin -- oh, no, we
3 are not going to do that. So, here you have trade
4 policy effectively working against what antitrust policy
5 is trying to do.

6 We talk about technology policy with no mention
7 of what happened in the early 1980s with the change in
8 the patent law, right? Patents are going up now,
9 lawsuits are going up now, you know, talk about, you
10 know, impact on innovation and technical changes, look
11 what's done in technology policy. That's not antitrust
12 policy, but it's the crazy patent system that we've got
13 now with, you know, the change in the '82 Act.

14 Regulatory policy, Luke's point was fair enough
15 about cable behavior, but again, it's a regulatory
16 policy that's facilitating that, you know, the whole
17 communications regulatory policy is screwed up. Again,
18 this is not antitrust's, you know, cross to bear, but to
19 some extent, it is. So, where you have a policy that is
20 constantly at cross-purposes with other areas of what
21 the Government is trying to do, it is going to make it
22 very difficult for you to figure out to do, but I might
23 add, the first best thing to do would be to have a
24 technology policy, regulatory policy and trade policy
25 that makes some sense, okay?

1 Government successes, you know, I think the key
2 thing on the government successes is almost more of the
3 learning rather than the status assessments. You know,
4 Standard Oil was interpreted as a success, and let me
5 just suggest that there is some controversy about that,
6 Bob Crandall and I head our exploration on antitrust
7 policy, and you know, our look at what the
8 counterfactual evidence was that, you know, there was
9 very little that we could see from changes in prices, if
10 one wanted to use that as a measure of welfare, and it
11 is certainly not a reasonable starting point for what
12 Standard Oil did.

13 I think the more attractive thing that I would
14 point to about antitrust is the learning just how one
15 thinks about problems in terms of anticompetitive --
16 what was initially thought of as sort of knee-jerk
17 anticompetitive reaction as to whether these things were
18 really efficiency-enhancing types of behavior and also
19 just the nature of dynamics, how things are changed, and
20 I think that's where antitrust policy has gone and is
21 certainly a lot better.

22 Now, the big thing about all of this and my
23 concern about this whole area is the effectiveness of
24 this evidence accumulated, because that's what you
25 really want. In certain areas, just to go to a

1 completely different area, you know, one's seen study
2 after study about congestion policy in this country,
3 every one of them, huge welfare losses, the Government
4 ought to have efficient pricing, and no one is really
5 disagreeing with that. There are obviously variations
6 from here to there, but the evidence really builds
7 beautifully, and you can just sort of drop it on
8 somebody's lap and say, okay, look, deal with this, and
9 it's easy to do that.

10 Here, it is quite hard. I mean, yes, there are
11 fragments of evidence, cases here and there, and as I
12 said, what Crandall and I attempted to do was actually
13 get a base case for a starting point of saying that
14 this -- and if you disagree with that, fair enough, but
15 at least build on that, reshape it, and then start
16 adding more, and frankly, the disappointment has been,
17 at least in the reaction to that paper, is, you know, I
18 could -- is predictable either pro or critical antitrust
19 people reacting to it, but in terms of actually new
20 evidence being added to the enterprise, that just
21 doesn't seem to be what idle people care about these
22 days, which leads to my third concern, where is the
23 empirical IO field going? And there was very little
24 mention of that here, and with good reason.

25 I mean, it is not clear where it is going in

1 relationship to your interest in what is going on here.
2 I mean, my sense, as I would say more of an observer
3 than a participant, that empirical IO is sort of trying
4 to get "uber" dynamic model of industry behavior, you
5 know, that's what we're looking for, for the -- what's
6 the word -- the Holy Grail, I guess that's because I saw
7 The Da Vinci Code on the plane. That's what we are
8 trying to do, and to the extent there's empirical work,
9 it's pretty much demonstration papers, right?

10 I mean, a lot of them are really pretty trivial,
11 you know, you can get data on it -- and I won't go into
12 examples, but you know what I'm talking about, and you
13 know, who cares? And they don't care. They just want
14 to show, yeah, I can get something estimated with some
15 generalized method of moments estimator and add some
16 structural stuff and something is going to get there,
17 and yeah, I'll talk about an industry, about some hotel
18 off a Nebraska highway, no one cares, but you know, the
19 results actually made sense.

20 The question is, where is this research going?
21 Now, I don't want to rule this out, because this is a
22 big ticket item. If people can succeed -- and this is I
23 think really the positive spin on it -- in really
24 building, you know, a structural dynamic model of an
25 evolution -- structural dynamic model of the evolution

1 of industry, to hell with these case studies. You have
2 got your tool, right? You just use this, run through
3 any policy scenario, and you could figure out, you know,
4 where things are going, what you ought to be doing, and
5 that is your guidance.

6 Well, you know, we've tried that with Keynesian
7 models (ph), we have tried that with rational
8 expectations, we have tried that with real business
9 cycles, you know, in a sense it's a parallel to macro
10 that we are really going to figure out in a big picture
11 way analytically how markets behave, industries behave,
12 and that will be your guidance for policy.

13 So, you know, that's where it's going. It's not
14 intersecting I think small case studies will build up,
15 it is not doing thing in terms of big picture facts,
16 even motivating what's going on, what people view to
17 within industry seems to be more the availability of
18 data and possible consistency with the analytics they
19 want to pursue.

20 All right, so, you know, where does that leave
21 us? Well, you know, there are three ways to go, and to
22 some extent you can pursue them simultaneously, you
23 know, you can think about first looking more what the IO
24 field is doing, the general model, that kind of work, or
25 I would say more constructively try to focus that kind

1 of work on the types of problems that you are interested
2 in.

3 The case evidence, I guess, you know, my concern
4 there is just whether it's accumulating, is it likely to
5 accumulate, because otherwise it won't be all that
6 helpful. You will continue to just have patches of
7 evidence that just don't seem to bind together to tell
8 you anything in general.

9 My interest is really going back to the first
10 one, which was abandoned, and probably for good reason,
11 is getting broad summary measures -- welfare measures of
12 industries, conservation measures is obviously one, and
13 work on quantifying the welfare loss from monopoly --
14 and that line of research obviously had its problems --
15 but there was a start of work I remember by Bobby
16 Willig, Dansby and Willig on trying to come up with
17 industry performance measures that I thought was
18 promising, but I think it went out very quickly as
19 people turned over to conduct, and so that work never
20 went anywhere.

21 But I think that it might be useful to think, at
22 least in some way, along those lines for this agency.
23 There are broad ways of gauging industry performance,
24 you know, is there really something systematically wrong
25 with what is going on with U.S. industry? Are we seeing

1 anything that is now, you know, sort of really
2 threatening a \$13 trillion economy, or, okay, there are
3 some bad guys, we know that, every once in a while
4 certain things are going to go on, but the truth is
5 markets are self-correcting, the world is getting more
6 competitive all the time, you know, what do we have to
7 do?

8 I would not say at this point we're ready to say
9 where to go. I would just sort of step back and reflect
10 on various approaches and see what makes the most sense.

11 (Applause.)

12 MR. HEYER: Okay, we are about to take our
13 break. We are going to be joined afterwards, there will
14 be some remarks and discussion involving two of the
15 other panelists, Dave Reitman and Bob Marshall. I would
16 encourage people to think during the break about maybe
17 picking up a little bit on what Cliff ended with some
18 and other comments that were made about, say, the issue
19 of empirical anecdotes and what can be generalized from
20 them or not, should we be focusing more on case-by-case
21 analyses, or is there some kind of broader policy
22 guidance we can learn from the empirical work?

23 Anyway, let's take our break, and we will come
24 back -- what, 15 minutes?

25 COMMISSIONER KOVACIC: About 15 minutes.

1 MR. HEYER: Fifteen minutes, all right.

2 (A brief recess was taken.)

3 MR. HEYER: Okay, so let's resume.

4 The way we thought we would do it is Dave
5 Reitman and Bob Marshall are going to give short
6 presentations before we get into what hopefully will
7 begin with a round table discussion where maybe some of
8 the panelists and the discussants will comment on what
9 went on this morning and respond to one another,
10 elaborate on one another's comments, and then if we run
11 out of things to talk about, Bill and I will have a lot
12 of important questions as well.

13 So, we will begin with Dave Reitman. Usually
14 when people introduce others they say, "It's a pleasure
15 to introduce so and so," even if they don't know them
16 from a bar of soap. Dave is a pleasure for me to
17 introduce because I know him very well, and he is
18 relatively soft-spoken but incredibly talented
19 economist, and he has one other thing that makes him a
20 particularly valuable addition to this panel, I think,
21 is that unlike most of us who have done a lot of maybe
22 talking and thinking about some of the issues that are
23 raised by the topic, Dave has worked in the trenches on
24 them.

25 He was the Government's expert witness in U.S.

1 v. Dentsply and did an extraordinary amount of both
2 theoretical and empirical work on that case in the
3 course of testifying, and he also did a great deal of
4 empirical work in support of our experts in the American
5 Airlines case, which, sadly, never actually got to
6 trial, but I'd be interested in Dave's comments both
7 general and specific on these issues.

8 Dave?

9 DR. REITMAN: Thanks, Ken.

10 As Ken suggested, I just want to give a few
11 comments today as an antitrust practitioner about the
12 value of empirical tools, empirical work, in presenting
13 an antitrust case. It's really become clear listening
14 to the panel this morning that in doing a case, often we
15 are really talking about exceptions, that even if you're
16 convinced that exclusive dealing 90 percent of the time
17 or 99 percent of the time is beneficial, leads to lower
18 prices and some of the things Luke had in his slides,
19 still we're looking for the exceptions at the time when
20 it's used as a deterrent device or an exclusionary
21 device, and so the question is, what kinds of tools can
22 you bring to bear when you are looking at a specific
23 firm in a specific industry and a specific practice?

24 Again, as Ken said, my background, my tenure at
25 the DOJ, I was involved in two extremely lengthy

1 litigated Section 2 cases, and both of them involved a
2 fair bit of empirical work. American Airlines, I really
3 think there was a tremendous amount of empirical support
4 for a variety of elements of the case, and then
5 Dentsply, the Government ended up commissioning a survey
6 to try to measure some of the effects that were going on
7 in that market.

8 Now, if you look just at those two cases, you
9 have to say that neither of those was a great
10 testimonial as to the value of empirical work actually
11 going forward and presenting the case. In American, as
12 I said, there was all this empirical evidence brought to
13 bear, and yet the case never made it past the summary
14 judgment phase. In Dentsply, the survey was presented
15 and the analysis based on it was presented at the
16 District Court level. The District Court Judge threw
17 out the survey as being unreliable and decided against
18 the Government. Then the case was appealed to the Third
19 Circuit, which without the benefit of the empirical
20 evidence, was nevertheless able to reverse the decision
21 and decide in favor of the Government.

22 So, you might look at that and say, it doesn't
23 seem like the empirical evidence contributed much.
24 There are other cases along those lines that you could
25 point to in recent years where you would say it's not

1 clear that you really need to have the empirical pieces
2 in there. So, just to give one more example, if you
3 look at the LePage's case, where a lot of the
4 commentators looking at that have said, it really would
5 be nice if we had more evidence here, more data, so we
6 could decide between these competing theories on whether
7 this is procompetitive or anticompetitive. The
8 Solicitor General on the cert petition before the
9 Supreme Court really echoed the same things, we really
10 would just like more information, and yet the plaintiff
11 was able to present that case and win it without having
12 done the kinds of empirical things that the commentators
13 would have liked.

14 So, I'd like to just spend a few minutes looking
15 at the American case and the Dentsply case and talk
16 about what really is the value of going through and
17 doing the empirical exercise, and it may be just by the
18 magic of self-selection that in this room we're kind of
19 preaching to the choir, but nevertheless...

20 Let's start with the American Airlines case.
21 The airline industry is one where companies involved
22 collect a lot of data themselves and the Government
23 collects a lot of data. So, there's a tremendous amount
24 of data that's been a mainstay of the empirical IO
25 literature, and so it's only natural that a

1 monopolization case involving the airline industry would
2 have a lot of empirical work in it.

3 The Government's main expert in this case, Steve
4 Berry, is a preeminent empirical IO economist, and he
5 brought, as I said, empirical evidence on virtually
6 every point made, and a lot of that is not in the public
7 record, as there was no trial, but just to give a sense
8 of the scope of the empirical effort, you may recall
9 that what turned out to be the Government's main test
10 for predation when the case went up for appeal was what
11 was called Test 4, which suggests that there are at
12 least three and maybe a lot of other tests that
13 economists turn to to try to find the right way to take
14 the data and to sort it out and to say this is the right
15 way to classify what is predatory and what is not.

16 So, what, again, is the value of having that
17 empirical test for predation? And to answer that, let
18 me just go back a little bit farther in time. Not long
19 after I started at the Justice Department, Joel Klein
20 came aboard as Deputy Assistant Attorney General, and he
21 was making the rounds to the different sections to
22 introduce himself, and when he came to EAG, one thing I
23 remember from his presentation was he quoted from "The
24 Four Quartets" by T.S. Eliot, and he quoted, "We shall
25 not cease from exploration, and the end of all of our

1 exploring will be to arrive where we started and know
2 the place for the first time."

3 I actually have no idea at this point what
4 Joel's point was for quoting that, but it does seem to
5 apply nicely to the American case. The theory of what
6 happened, the basic story never changed from the very
7 beginning, before the complaint was filed, which was
8 American added a bunch of flights and routes where it
9 competed against low cost carriers and drove them out of
10 the market, but the understanding of the way that
11 mechanism worked, really why it worked and what it was,
12 really only evolved by really years of wrestling with
13 the data and trying to get a handle on what was going
14 on, and so the end, when we looked at sort of the final
15 presentations and the appellate memos, we said that the
16 Justice Department really seemed to know what they were
17 talking about and what they thought had happened, which
18 was that American Airlines was able to, by adding
19 flights, was able to take demand away from its competing
20 low-cost carriers in a way that it simply couldn't do by
21 lowering prices or by removing fare restrictions, but
22 the cost of that was to reduce load factors and push
23 American up to that increasing part of the marginal cost
24 curve to the point where the incremental cost of adding
25 these additional flights was above both the average cost

1 of serving the route as a whole and also the incremental
2 revenues received from the passengers.

3 So, there's a test that, you know, when you
4 arrive back at the place you started, you understand it,
5 and I certainly don't want this panel to start to brew
6 up a fight about whether that was a right theory or
7 whether there really was harm there. The only point is
8 that we really didn't understand what we were saying,
9 what we had, until that process of wrestling with the
10 data, really getting into it and being able to say, this
11 is the test, which at least for this company in this
12 industry in these markets is able to distinguish what
13 looks like predatory behavior from all the other routes
14 they had, which, you know, generated essentially no
15 false positives.

16 So, anyway, whether that's a legal analysis is
17 for the courts to decide, but that was the value of the
18 test there.

19 If we could turn to the Dentsply case, which is
20 sort of toward the other extreme in terms of the amount
21 of data available, this is a market where exclusive
22 dealing had been used for at least 15 years. Following
23 the kinds of things Luke was saying earlier, we looked
24 around for what we could use as a natural experiment,
25 and one thing that may be a potential was to compare the

1 policy in this country with other countries, but that
2 was ruled out fairly early on by the Court. So, we were
3 left with not a whole lot of empirical evidence to go
4 on.

5 To fill in the gap, what the Government
6 commissioned was a survey of dental labs, which are the
7 consumers of the dental teeth that were subject to
8 exclusive dealing, and among other things, the survey
9 asked respondents how they would choose among brands of
10 teeth given various prices and distribution
11 combinations, and so from those responses, you can then
12 map out demand, service, and estimate or quantify what
13 the anticompetitive effects were from the exclusive
14 dealing policy both in terms of pricing and in terms of
15 market shares, and that quantification was important.

16 Dentsply has been characterized by some as, you
17 know, as an easy case, or as in Luke's slide this
18 morning, it's one where the aggressive behavior was bad
19 in the proximate term and bad in the distant term,
20 right? But the only reason we're able to say it was bad
21 all around is because the District Court ruled that the
22 procompetitive explanation and justification that
23 Dentsply put forward was pretextual.

24 If you look at the case before the decision,
25 before the trial, before even the decision to bring the

1 case, it's not at all implausible that exclusive dealing
2 would have some advantages in aligning the incentives of
3 Dentsply with its dealers and that that would generate
4 some benefits. You may recall the particular mechanism
5 that Dentsply eventually put forward seemed to be
6 inconsistent with the facts, and so given how long
7 exclusive dealing had been in the market, it was tough
8 to be able to say how much competition would benefit by
9 removing the restrictions on dealers, or to say that the
10 benefit from eliminating competition or eliminating the
11 restriction would be larger than these amorphous
12 benefits from aligned incentives without some sort of
13 systematic study of customer preferences.

14 As it turned out in the case, of course, the
15 weighing -- it turned out -- it proved to be easy,
16 because we could sort of rule out procompetitive
17 benefits, but more generally, looking forward, there's
18 almost always going to be this kind of possible
19 trade-offs between the procompetitive and
20 anticompetitive story, and some quantification is vital
21 in determining that effect.

22 So, that leads to a third benefit of empirical
23 analysis in looking at these kinds of monopolist
24 practices, which is just in terms of lending conviction
25 about understanding what really happened or what we

1 think is happening in that particular market. We could
2 talk about this both in the context of American and
3 Dentsply, but I am going to stick to Dentsply, because
4 as Ken said, I was a testifying expert in this case, and
5 I suppose as a testifier, there is not a huge difference
6 between saying what could have been happening in a
7 market and what did happen. In both cases, the
8 disparate evidence you gather from different sources and
9 try to piece it together in unified whole, which gives
10 you the best plausible explanation of what was going on
11 in the market, but at least for me, it made a great deal
12 of difference in crossing over from could have happened
13 to it did happen to be able to actually see that effect
14 quantified in the survey data.

15 That is to say, my conviction that Dentsply's
16 dealer criterion had actually harmed competition was
17 crystallized just by being able to see it in the numbers
18 after analyzing the consumer preferences that came out
19 of the survey that had been commissioned, and it
20 crystallized it in a way that I wouldn't have been able
21 to achieve just by looking at documents and depositions
22 and all the other evidence, even though all of that
23 other stuff was consistent with the same conclusion.

24 Now, of course, the lessons we drew from the
25 survey were not uncontested and will never be

1 uncontested in this manner of case, and the level of
2 conviction didn't seem to make much difference to the
3 District Court, since they concluded that the survey
4 itself was unreliable, but I do have to believe that the
5 whole testimony was made stronger by having conviction
6 about key parts of it that were reinforced by the survey
7 and that empirical evidence contributed a great deal to
8 that sense of conviction.

9 So, that's really all I wanted to say as sort of
10 a little ode to the value of empirical research in these
11 cases. Hopefully, not a eulogy, I don't think it's a
12 eulogy, but there's value in knowing what you have,
13 value in having confidence in that, and then just being
14 able to quantify how much difference it makes in
15 competition, and those things are not always going to
16 carry the day, like they didn't in these two cases, but
17 they are nevertheless important to preserve for future
18 cases.

19 Thanks.

20 (Applause.)

21 COMMISSIONER KOVACIC: Thank you, David.

22 Our last presenter before we turn to a
23 discussion is Bob Marshall, who heads the economics
24 department at Penn State and co-directs ITS Center For
25 the Study of Auctions, Procurements and Competition

1 Policy. Bob's on leave this year. He's serving during
2 that time as a partner at Bates White.

3 Our interest in asking Bob to come today, again,
4 is related to a major strain of his own research. He
5 frequently has married both empirical work and theory, a
6 great deal of it dealing with auctions, procurement and
7 collusion. Bob's going to tell us a bit about lessons
8 that might be derived from that body of work for
9 dominant firm behavior.

10 Bob.

11 DR. MARSHALL: Thank you, Bill. If you got too
12 flowery, I knew that means you would be late with some
13 of the things you owe me as a co-author, so it's good to
14 hear that it didn't get out of hand. I am going to give
15 a brief overview and then I will get into some of the
16 slides.

17 So, I do a lot of thinking about cartels and
18 cartel behavior, so I understand Section 2 is not about
19 cartels, but a cartel is like, I would argue in many
20 cases, a single dominant firm, and cartels often go
21 beyond just the suppression of interfirm rivalry in
22 their actions. In fact, I am going to show you a number
23 of things where they go into behaviors that we would
24 think about as Section 2 violations. So, what we are
25 going to try to do here is tell a compelling story that

1 we can get some window into understanding Section 2
2 through the behavior of cartels, and hopefully there's
3 some additional tractability in terms of empirical
4 analysis that comes from that. So, that's the gist.

5 So, there's some fundamental difficulties of
6 Section 2 analysis. So, benchmarks are real important
7 in terms of doing analyses particularly of cartel
8 behavior. We like to think we have got a period of
9 time, for example, when firms are acting in a
10 noncollusive manner, and then we can look at this other
11 time period of alleged conduct to see what's going on.
12 With ongoing dominant firm behavior, that's often not
13 there, and that creates some difficulties with doing
14 Section 2 type analyses.

15 Then there's an issue of what is legal and what
16 is not for a dominant firm, and that usually doesn't
17 arise in the analysis of cartels. When a cartel
18 suppresses interfirm rivalry and then it goes off and
19 predates and then it goes off and engages in exclusive
20 dealing, no one calls us to say, "Well, I wonder if that
21 predation was really predation or if the exclusive
22 dealing was really exclusive dealing of an
23 anticompetitive nature." The fundamental premise that
24 cartels function under when they get together to
25 suppress interfirm rivalry is to suppress competition.

1 So, when they engage in these behaviors, it's somewhat
2 doubtful to think that they're thinking about some
3 social good that is not about suppressing competition.

4 So, I have already explained that we can think
5 of a cartel as being something like a single dominant
6 firm, and they can be highly heterogenous. Some are
7 struggling to maintain internal cohesion and stability.
8 Defections might be occurring; finding a mechanism that
9 works may be difficult. For others, those things might
10 be easy to attain and settle in very quickly. The
11 central goal is the elevation of prices and profits, but
12 then we see these other behaviors that start to merge,
13 and I will go through examples, predation, blocking of
14 entry, exclusive dealing, bundling, tying. Again, part
15 of cartel behavior.

16 So, there's some interesting empirical questions
17 that are immediately posing themselves here. Why do
18 some cartels engage in these Section 2 like violations
19 but others don't? And what's the advantage of looking
20 at this through the lens of cartels? Well, there is a
21 rich discovery record typically in place for some
22 cartels because they got busted, and because a lot of
23 them got busted, it means that we're able to look at
24 starting dates, ending dates, and we're able to say, Oh,
25 okay, so this is when the behavior began; this is when

1 it ended. This is when the antirivalry behavior began;
2 this is when it ended. This is when the monopolization
3 behavior began; this is when it ended.

4 Now, you may say, well, perhaps those things are
5 coincident and difficult to separate, the antirivalry
6 behavior and the Section 2 behavior. A lot of times
7 what we will see as we look through some of these cases
8 that I'll pose here is that the anti-rivalry behavior is
9 the first thing that happens. You have got to get that
10 set up first when there's running of a cartel. It's
11 then later, as the cartel reaches some maturity, that it
12 starts to investigate other sources of profit, and
13 that's where we get to the Section 2 violations.

14 I do this when I teach my "Economics and
15 Collusion" course at Penn State. These are Porter's
16 Five Forces. Now, in business school, this is basically
17 Business School 101, so let me explain why I put this
18 diagram up and what it is. These are the five forces of
19 competition that affect a firm's profits. So, this is
20 from Michael Porter's competitive strategy book.

21 In the middle of this diagram is interfirm
22 rivalry. For some reason I have been told not to refer
23 to that as the green zone, but in the green is the
24 interfirm rivalry, okay? So, this is whatever it may
25 be, differentiated product/price competition, whatever

1 this may be that's limiting profitability among the
2 competitors in the industry.

3 Now, what are these other four forces on the
4 perimeter? Well, at the top we have threat of new
5 entry; on the right, bargaining power of buyers; down
6 below, whether the goods produced by the firms in the
7 industry have substitutes or compliments; and on the
8 left, the bargaining power of suppliers. So, if we have
9 a lot of substitutability, we have a lot of entry
10 possibility, et cetera, well, profits are going to get
11 hurt by that, and if we don't have those things, profits
12 will be helped.

13 So, I would argue the following: Cartels at
14 their initiation work on the green zone, they are
15 limiting interfirm rivalry. That's the Section 1
16 violation. Once they get that nailed down, they then
17 often venture out into the blue zone. So, blue is
18 Section 2; green is Section 1. That's the way I view
19 that diagram.

20 So, I want to talk about some examples here, and
21 this is all based, by the way, on a co-authored paper
22 with my co-author Randy Heeb and Leslie Marks (ph),
23 who's at Duke University, and Randy is at the Bates
24 White office here. So, what are the examples of
25 monopolization behavior from recent cartel cases? So, I

1 am going to give you five cases, four listed here and I
2 will read another one, and that's not a recent one. I
3 had to go back to Stocking and Watkins and pick up
4 another example from there.

5 But let's start with citric acid. So, this is
6 vitamins in training is a way you could view citric
7 acid. The guy who ran citric acid was promoted to run
8 the vitamins cartel. So, this is an important cartel in
9 the history of Section 1 violations. And, of course,
10 what they're trying to do, these firms, is suppress
11 interfirm rivalry. This is a section from the European
12 Commission decision regarding what part of the action,
13 part of the conduct of the citric acid cartel. So, they
14 were very bothered by entry by Chinese manufacturers,
15 particularly into the European community, so those
16 customers who were buying from the Chinese were
17 targeted, and there were specific predation against the
18 Chinese targeted at those customers. They were going to
19 undercut those customers, and this list of customers was
20 referred to as the Serbian list, and then there was
21 frequent discussions that went on about how that
22 predation activity was progressing.

23 Now, when you read stuff like this in European
24 Commission decisions, it becomes very clear very quickly
25 it's not just about the suppression of rivalry amongst

1 themselves. Once they have got that nailed down, as
2 members of the cartel, they start to reach out into
3 other mechanisms that they could use to increase
4 profitability.

5 Carbon brushes, this is also a story about
6 predation, and I'll just go to the next slide quickly
7 and show you a particular example on German
8 reunification. There was an East German company, EKL,
9 and there was a pesky little noncartel firm, and so two
10 strategies were agreed. None of the members of the
11 cartel would supply any graphite to EKL, that's the
12 basic raw material in making a carbon brush, the block,
13 carbon block, and EKL would be denied any market share
14 by systematically undercutting it with all customers, so
15 that it would not be able to sell anywhere. EKL was
16 taken over by one of the cartel members in 1997. Again,
17 targeted predation at a noncartel firm.

18 Now, keep in mind, again, this is a cartel that
19 begins and ends. This predation begins in '92, well
20 predating the beginning of the cartel behavior. So, we
21 have got the antirivalry behavior, that gets
22 established, that gets set in place, then the
23 monopolization behavior begins, okay?

24 Then there is also things like standardization.
25 The cartel implements a ban on advertising, not to

1 advertise or participate in sales exhibitions.

2 In vitamins, agreed-upon elimination of
3 competitors, and in this case, we're buying out
4 competitors, Coors, that's the folks who make beer, and
5 we're -- the two major cartel members here, Roche and
6 BASF, are racking up the purchase price in proportion to
7 their market shares.

8 The European Commission goes on to talk about
9 the use of the bundling of the basic vitamins into
10 premixes as another mechanism by which the cartel
11 predated against downstream blenders, so you have to
12 look -- you have to understand a little bit of what
13 happens here.

14 Hogs and chickens and cattle get fed a premix of
15 vitamins, and there were groups in the marketplace who
16 would actually mix the vitamins together and sell the
17 premixes to be added to the feed, and so to eliminate
18 those pesky competitors in the downstream market, strong
19 actions were taken by Roche and BASF to drive them out.

20 The European Commission notes in particular, if
21 you go to the second bullet here, it says, "In
22 addition," referring to Roche and BASF, "they enjoyed
23 greater flexibility to structure prices, promotions and
24 discounts and had a much greater potential for tying."
25 Again, we are not talking about just the suppression of

1 interfirm rivalry here. We are well into Section 2
2 violations now.

3 Sorbates, we're talking here about -- this is
4 another European Commission decision -- the blocking of
5 entry to the marketplace. And then I went back and just
6 pulled something from Stocking and Watkins regarding
7 General Electric and the incandescent electric lamp
8 cartel. Together with other lamp manufacturers, it made
9 exclusive contracts with the manufacturers of
10 lamp-making machinery and in bulbs and tubing, binding
11 them to sell goods exclusively to General Electric and
12 the companies associated with it or to sell to competing
13 companies only at discriminatory prices. So, this is
14 part of the action of the cartel.

15 So, let me just as an aside say, standing issues
16 about cartels are confusion to me at this point.
17 Noncartel firms don't have standing because they are
18 always the beneficiaries of cartel behavior. That seems
19 a bit odd to me just an aside here given the fact that
20 these Section 2 violations are existing, well documented
21 in the record, with regard to the noncartel firms, but
22 that's just an aside.

23 I would just like to say that I think that this
24 is a rich avenue for potential empirical investigation,
25 again, because we have got clear benchmarks in place.

1 We can also get a clear look at the discovery record
2 associated with cartel behavior and start to see when
3 these kind of behaviors, the Section 2 violations, are
4 implemented by the cartels, look across industries,
5 cartels in different industries, and see who was doing
6 these kind of activities, which industries are not
7 engaged in those kind of activities.

8 I'm hopeful that this illuminates as a potential
9 or at least gets investigated as a potential some of
10 these ambiguities that have existed in the past with
11 just looking at single dominant firms as being the
12 source of data and empirical inference.

13 COMMISSIONER KOVACIC: Thank you, Bob.

14 (Applause.)

15 COMMISSIONER KOVACIC: Before we have the more
16 open-ended discussion among all the panelists, I'd like
17 to give our first four presenters an opportunity simply
18 to comment on what took place or to add additional
19 thoughts that came to mind. Could I simply go through
20 the order again, go with Mike, Luke, Jon and Cliff?

21 Mike?

22 DR. SCHERER: Well, lots of things I found
23 stimulating, so I'll have to be very, very selective.

24 I think the thing that struck me most was
25 Cliff's distinction between the European Union and the

1 United States. There are two points I'd like to make
2 there. One is a puzzlement; one I think I understand.

3 It's been said by several of the panelists that
4 the European Union has been more aggressive in some
5 sense towards dominant firms. They have tended to
6 pursue an abuse of dominance standard, whereas our
7 approach has been mainly structural combined with some
8 elements of conduct.

9 On the other hand, the Europeans have been
10 severely limited because when they tried to go against
11 abuse, as in, for example, the Hoffmann-La Roche Valium
12 case and the Volkswagen case, they ran into big troubles
13 ascertaining what an abusively high price was or an
14 abusively high level of profits was, and in this sense,
15 they are going back to the caveats that Judge Taft
16 expressed in the Addyston Pipe case more than a century
17 ago, but I think there's something else going on.

18 I think the ghost of Friedrich Hayek haunts the
19 Europeans in the sense that Hayek argues that you simply
20 cannot tell what an abusive price is. The European
21 community ran into this squarely in Microsoft. They
22 were unwilling -- at least initially, they realized in
23 the end they had to -- but they were unwilling initially
24 to state the fees that Microsoft could command for
25 licenses to its intraoperability information. And even

1 more seriously, when they required the provision by
2 Microsoft of an unbundled version of Windows without the
3 media player, they allowed Microsoft to sell both
4 products at an identical price. The obvious thing to do
5 would have been to set a price differential, but they
6 refrained and have continued to refrain from doing this,
7 and therefore, virtually no one has taken the unbundled
8 version when you could get a more complete version.

9 The Europeans have a serious problem. When you
10 look at our past compulsory licensing cases, you see we
11 were much more willing to intervene and said, "Here's
12 the reasonable royalty that you can command."

13 Now, the other thing about the Europeans is
14 this: Beginning with a conference at Fontainebleau in
15 1965 and then the book by Jean-Jacques Servan-Schreiber
16 and then another conference in Germany in 1976, and God
17 knows what else, the Europeans have adopted the policy
18 of encouraging large dominant national champion
19 enterprises with the express purpose of competing with
20 the United States technologically. In most respects,
21 they have failed.

22 In most areas of modern technology, they have
23 lagged the United States, and partly I think because we,
24 on the one hand, following the sage advice of Chairman
25 Mao, have encouraged 100 flowers to bloom. The

1 Europeans have tried to cultivate their national
2 champions, and they just didn't have the diversity
3 required to achieve technological innovations. The big
4 exception was in a couple of high-scale economy
5 industries. One is the provision of nuclear power
6 plants, and the other is the provision of aircraft,
7 although they are having trouble there now, too, but for
8 a while, Airbus was doing very, very well.

9 I think there really are important lessons to be
10 learned here, and they need to be studied much more
11 carefully than they have been thus far.

12 A point that Luke made, and I think Bill Kovacic
13 made it, too, and it is very, very important, that we
14 should be doing follow-up studies on areas in which we
15 have intervened. We did this, among others, in Xerox.
16 The FTC specifically commissioned a study by Tim
17 Bresnahan of the results of the Xerox case, which found
18 that it had been quite beneficial. Xerox did its own
19 study by David Kearns in a book entitled Prophets in the
20 Dark. It found that the entry of Japanese competition,
21 which was facilitated by the FTC intervention, had a
22 remarkably salutary effect on prices, reliability and
23 technical change in the copying machine industry.

24 Let me end with one footnote on the marginal
25 paper, vitamins. I happened to be a consultant for

1 Eisai in the vitamin E case. One should not look into
2 these things without taking into account international
3 trade rules and how they shape the framework within
4 which international agreements appear. Specifically, in
5 the case of Eisai, Eisai was a newcomer to the vitamin E
6 market. They began entering the U.S. and European
7 markets, and the chairman of Eisai was called into a
8 meeting by the head of Hoffmann-La Roche's vitamins
9 operation and was told, I quote exactly, "If you yellow
10 bastards don't join our cartel, we will drive you out of
11 both the U.S. market and the European market with
12 antidumping suits."

13 What happened after then is very complex, but
14 there remains in my mind at least a puzzle. I couldn't
15 find any change in Eisai's pricing behavior after they
16 allegedly joined the cartel. The one thing observable
17 that changed is that they began shipping more of their
18 output to China and they began dumping their excess
19 output in China. Why, I don't know, whether it was
20 because China was growing rapidly or that was a cartel
21 facilitating device, I do not know. There are
22 interesting stories here to be explored.

23 Thank you.

24 COMMISSIONER KOVACIC: Thank you, Mike.

25 Luke?

1 DR. FROEB: Thanks. I just want to say a couple
2 of things.

3 First of all, to talk about Jon Baker comments
4 about how to balance the good proximate effects against
5 the bad distant ones, and there's two ways to do that,
6 you know, empirically or use some kind of model,
7 theoretical model that helps you do that, and if you
8 kind of contrast the way we balance horizontal, you
9 know, efficiencies against unilateral effects, we have
10 well-developed models that allow us to make the
11 trade-off. I just don't know of any well-developed
12 models that would allow us to make those kinds of
13 trade-offs, and furthermore, if we held our prosecutions
14 of these Section 2 cases to the same levels or same
15 standards that we did our merger cases, I mean, I think
16 it would be very difficult to bring good cases in those
17 instances.

18 I want to talk a little bit about what Cliff
19 Winston said about where is the empirical literature
20 going. In economics, young IO economists demonstrate
21 their technological expertise by building structural
22 models and, you know, trying to estimate them, and they
23 ignore, you know, trying to figure out, well, what's the
24 effect of things like Wal-Mart entry, you know, what is
25 Wal-Mart doing or what -- doing follow-up studies,

1 because they seem so pedestrian, yeah, anybody can do
2 that, you know, you just have to gather the evidence
3 and, you know, control for competing factors, and so
4 there's a natural bias in the economics literature
5 favoring, you know, structural technical modeling, even
6 when it's not appropriate, and we see that a lot. I
7 think that is one reason for the dearth of good
8 empirical evidence in industrial organization, because
9 we have this fetish almost with structural modeling.

10 I want to agree with what Cliff Winston said
11 also about the real problem is, you know, empirically,
12 you know, antitrust cleaning up trade, regulatory or
13 lousy patent policy. I mean, when you look at the
14 recent acts at the FTC bringing a lot of cases that
15 wouldn't exist but for the people abusing the patent
16 system, or I remember when I was back at the DOJ, we
17 challenged a merger between Westinghouse and GE in
18 electrical generators because Toshiba was out of the
19 market because they had been selling machine equipment
20 to the Russians to make submarines, so the Commerce
21 Department said, "Hey, you can't bid on electrical
22 generators in the United States," and that, you know,
23 would have made the merger okay, but, you know, we
24 blocked the merger because they were out of the market.

25 I want to note that Dave Reitman's Dentsply

1 case, he was able to estimate the proximate effect. He
2 wasn't able to estimate the distant effect, which wasn't
3 an issue in the trial because the judge said, "Hey,
4 there's no possible, you know, beneficial effect of
5 these exclusionary practices," but he was able to
6 estimate the proximate effect, not the distant one, and
7 I think the real challenge empirically is on these
8 distant effects, these indirect strategic effects.

9 I think that's all I want to say, and -- well, I
10 guess I would say to Bob, when you see these vertical
11 restraints in these cartels, I mean, suppose I form a
12 cartel upstream and I buy some downstream or put the
13 downstream guys out of business or refuse to deal with
14 them, I mean, there are certainly procompetitive
15 justifications for that given that you have a cartel.

16 COMMISSIONER KOVACIC: Wally?

17 DR. MULLIN: I would like to pick up on this
18 interplay between economic research, whether done at the
19 university or a think tank, and antitrust practice. So,
20 I've neither done any antitrust cases nor have I
21 estimated a discrete choice demand system. However, I
22 guess you can imagine talking about developing clinical
23 facts, which a judge or even an antitrust enforcement
24 agency might think are too bound up in the particular
25 circumstances to really be admissible.

1 I mean, if you said, okay, here are three or
2 four or five not tools but three or four or five, you
3 know, examples favors saying there's predation, is that
4 going to mean that the American case doesn't survive a
5 summary judgment? I don't know. I would be doubtful.

6 The argument I guess in favor of some sort of
7 methodology, right, is that, yeah, if the tool works,
8 then you can use it in lots of arenas. Operating very
9 quickly, so it's not a Section 2 example, but my sense
10 is that a lot of mergers involve firms that produce
11 differentiated products. The state of the art circa
12 1975 on estimating those models was not great. Berry
13 Levinsohn Pakes (BLP) offered a big methodological
14 improvement. Previously, the profession knew there were
15 problems with the standard approach. We just kicked it
16 under the rug and BLP took on a very difficult problem.
17 So, from their papers you can say, okay, well, I don't
18 just know something more about the automobile industry,
19 I can use this in other settings.

20 I guess the question that I have heard others
21 raise in other contexts in terms of the way the
22 industrial organization field has gone in certain
23 universities is whether -- maybe we did need to make
24 progress on the demand side and now have a better sense
25 of how to estimate demand, but we're industrial

1 organization economists. We study also the supply side,
2 at least at this point in the development of the
3 literature, it cannot yet say okay, here are some tools
4 in terms of supply that would allow you to make these
5 sort of counterfactual predictions. For example, if
6 this particular exclusive dealing isn't available, this
7 is how the market will change and this is how firms will
8 operate differently, which is a real cost of pursuing
9 models on motels in Nebraska or something like that.

10 COMMISSIONER KOVACIC: Thanks, Wally.

11 Jon?

12 DR. BAKER: Thanks, Bill, a couple quick things.

13 First of all, I need to be a law professor for a
14 moment. When Bob Marshall talked about Section 1 and
15 Section 2, what he really is saying is a distinction
16 between conduct that's collusive and exclusionary.
17 Probably you would attack all of that conduct in the
18 context of the cartel cases that Bob was referring to.
19 The exclusionary conduct, you would probably attack it
20 under Section 1 of the Sherman Act, not Section 2. But
21 when we're talking about monopolization under Sherman
22 Act Section 2, typically the conduct is exclusionary,
23 and so that's why Bob thinks it's instructive to look at
24 the exclusionary conduct for the cartels.

25 I actually think there's a close connection

1 between exclusionary conduct and collusive conduct,
2 because you can think of exclusionary conduct as
3 creating an involuntary cartel or a coerced cartel.
4 Think about it this way: The dominant firm would like
5 to collude with a fringe rival, a prospective entrant or
6 whatever, but the rival doesn't go along, so the
7 dominant firm has to force the fringe rival or
8 prospective entrant to compete less aggressively, cut
9 back on output, not expand, whatever it would require,
10 and it does that with a panoply of exclusionary
11 techniques, raising rivals' costs, reducing their access
12 to the market or whatever, and the result is that
13 industry output falls below the competitive level, not
14 by voluntary agreement among the firms the way a cartel
15 would, but essentially by coercing the maverick. It's
16 an involuntary cartel; that is how I like to think of
17 it. So, they are closely connected.

18 My other comment on the conversation we have had
19 here, have had today, is about the problems of assessing
20 the "but-for" world. That was brought up I think by
21 several people here, Bob and Wally and Mike I think all
22 alluded to it, and probably everyone else did, too. To
23 make this concrete, I started to think about the Intel
24 case that the FTC brought in 1998, which was when I was
25 bureau director. It was settled in 1999 I think after I

1 had left, and it's the case that Mike was referring to
2 where he was going to be the witness for the Federal
3 Trade Commission.

4 The basic idea was that Intel refused to deal
5 with certain customers, cutting off their access to
6 technical information about upcoming new microprocessor
7 products that the customers needed if they were going to
8 be able to design complimentary products like personal
9 computers, and they did all this as a way of coercing
10 the licensees -- or, I'm sorry -- yes, getting the
11 rivals to license their microprocessor technology to
12 Intel. That was the story that the Commission told, and
13 the rivals included Digital Equipment Corporation or
14 DEC, Intergraph and Compaq.

15 So, Intel was trying to get leverage in
16 unrelated commercial disputes involving the scope of
17 competing intellectual property rights. The theory of
18 the case was that what Intel did to cut off these
19 customers from the technical information diminished the
20 incentives of those three Intel customers, as well as
21 all sorts of other firms that are similarly situated,
22 whether they are Intel customers or they are otherwise
23 dependent on Intel, to develop new innovations relating
24 to microprocessor technology.

25 Just to give Intel's side of the story, they

1 defended by saying that the conduct alleged in the
2 complaint didn't diminish the incentive of any firm to
3 develop new innovations of any kind. So, that was the
4 dispute.

5 The case was settled with an agreement that
6 prohibited Intel from -- I wrote it down here --
7 impeding, altering, suspending, withdrawing, withholding
8 or refusing to provide access by any microprocessor
9 customer to -- oh, dear, I don't know what I wrote down
10 here -- some sort of information for reasons related to
11 intellectual property dispute with such customer -- et
12 cetera -- or basing any supply decisions for
13 general-purpose microprocessors upon the existence of an
14 intellectual property dispute.

15 So, the question is, all right, this case
16 against a big firm, it was technically a Section 5 case,
17 but it was basically a monopolization case, how do you
18 tell whether the consent made any difference? That's
19 the question I am trying to set up. The theory would
20 have to be that this consent encouraged rivals to
21 innovate in ways to take on Intel, and before they
22 didn't have the incentive to do that, and maybe that
23 makes sense.

24 I think that the kind of markets you're talking
25 about are winner-takes-most generally, and it's hard to

1 believe that Intel wouldn't keep innovating in those
2 markets even if you did something to make it easier for
3 the rivals to innovate, too.

4 But how do you prove or disprove that theory?
5 We know that AMD, a key rival, has been successful in
6 the last couple of years, but that doesn't settle the
7 issue. What we have to do is somehow construct a "but-
8 for" world and figure out how AMD would have done there.
9 We don't know whether AMD's success has anything to do
10 with this consent or not just from what I've recited as
11 the facts.

12 I guess what I am driven to, I'm not sure what
13 we would do. I think the best we could practically do
14 is probably use Section 6(b) of the Federal Trade
15 Commission Act to review the R&D plans and the marketing
16 plans of Intel and AMD and the other firms before and
17 after the case, assuming all the documents are still
18 available, and depose key executives and see if Intel
19 and its rivals changed their strategies -- we could
20 probably find that out -- changed how they thought about
21 innovation, the kind of innovation they went after, what
22 they would do with them and the like.

23 The point of this exercise is that it shows how
24 hard it is to construct the "but-for" world in any
25 actual case in order to either figure out the violation

1 in the first place, which was the point of some of my
2 colleagues here, or to evaluate how well we did in
3 bringing the case and remedying it.

4 I don't view this as a reason not to bring
5 cases, by the way, but I know that some people do.
6 That's my comment.

7 Go ahead, Cliff.

8 DR. WINSTON: Just two brief things, and let me
9 sort of shape them more toward ultimately, what advice
10 do we give Bill and Ken? Presumably at the end, they
11 will say, what should we do to make sense of all of
12 this?

13 You know, my comment on -- really about the
14 method -- the IO methodology is just more of a caution
15 about the difficulty of just focusing on, you know, can
16 we pull studies together and amass, you know, a core of
17 useful knowledge that way, and my caution was really
18 historical.

19 If we turn the pages back to the sixties, the
20 leading empirical enterprise of the day was basically
21 concentration and profit progression. I mean, there are
22 scores of those, and along with that was the policy
23 issue of, you know, should we have a deconcentration
24 policy in America as the focus for antitrust? And, you
25 know, these studies evolved certainly from, you know,

1 noneconometric approaches, contingency tables and the
2 like, to more sophisticated econometric approaches, but
3 ultimately the enterprise basically collapsed, obviously
4 concerns of heterogeneity and concerns that, in the end,
5 the concentrated industry is the good one, this is a
6 good thing we should be having, and there's just none of
7 that around at all, and no one even sort of looks at
8 that for much guidance.

9 Dick Schmalensee I remember in The Handbook of
10 IO tried to summarize that and offered, you know, 20
11 stylized facts that sort of stretches what you get out
12 of it, and I'm concerned that, you know, in the sense
13 the empirical IO we have got today may go in the same
14 way for a somewhat different reason, but ultimately,
15 there is a somewhat destructive nature of the
16 enterprise. It's extremely competitive, and it's
17 extremely easy to raise the stakes at every -- you'd be
18 surprised.

19 I mean, you know, at this point I would say BLP
20 has done a brilliant job of market share capturing,
21 nothing short of brilliant, among the best I have ever
22 seen of intellectual importers, and people think
23 naturally of, well, they have a nice demand system and
24 so on and so forth, but I think you will see, as certain
25 other papers come out, there are real cracks in even

1 what they've got, you know, for every model for which
2 you want to try to capture heterogeneity, you can point
3 out why there are problems in the way they are doing it,
4 and so almost every study can be replied with that as
5 the methodology pushes harder and harder and harder and
6 excludes more and more people and almost makes it
7 virtually impossible to understand for a lot of people
8 in practice.

9 I'm just wondering where all of this ultimately
10 is going to go and thinking, well, we can use this
11 still, you know, the simplest thing is in courts, but we
12 can't, because obviously the other side is going to come
13 back and use more technical things and just smash what
14 you do, and so I am concerned about ultimately where all
15 this stuff is going to converge in a constructive way.

16 You know, that said, then, you know, what then
17 would I say to emphasize? And I think this has been
18 touched on, but maybe not enough, and that is the
19 deterrence aspects of antitrust policy. I mean,
20 sometimes, you know, I am interpreted or at least my
21 paper with Crandall was interpreted saying we ought to
22 abolish antitrust intervention, and that's ridiculous,
23 we never said it, and I certainly don't believe it, but
24 the importance really of antitrust is in deterrence,
25 and, of course, that's your success story, but it's also

1 the most important and difficult thing to quantify.

2 So, the challenge, I would suggest, at this
3 point, where you could get help but certainly it's a
4 challenge at this point, is trying to find the areas
5 where there is evidence that we are clearly deterring
6 other areas, but what for going after Microsoft, who
7 would have known, all right, regardless of what people
8 think on that case, you know, other things that may be
9 done, and that may ultimately be the strength that a lot
10 of people think of antitrust and certainly the thing
11 that also needs to be emphasized and systematized, but
12 at this point, obviously, that's eluded our ability to
13 do that kind of thing.

14 MR. HEYER: Well, I want to give at least -- if
15 Dave and Bob want to say a couple of words. Otherwise,
16 we can throw out some very insightful, stimulating
17 questions.

18 DR. REITMAN: Well, we could end up looping
19 quite a bit here if we go round and round, but --

20 DR. MARSHALL: Fire away.

21 DR. REITMAN: Yeah.

22 MR. HEYER: Well, you guys can respond first
23 maybe.

24 I had one question I alluded to at the end of
25 the morning session that I wondered if everyone could

1 comment on, sort of a general question about the value
2 of individual anecdotes and studies, a number of which
3 have already been discussed, as compared with or maybe
4 related to what Cliff had referred to as the Holy Grail
5 and what I know Luke, some of his work has suggested is
6 broad policy guidance.

7 I mean, to what extent do folks think we are
8 able to learn enough from individual studies to base
9 policy and priors on versus doing what, say, serious
10 case-by-case analyses in determining the effects on an
11 "as it comes in the door" kind of basis?

12 Anyone? Professor Scherer? Luke?

13 DR. FROEB: I think that the broad aggregate
14 studies suffer from, you know, aggregation bias, and
15 it's very difficult to draw inference from the large
16 down to the small. I think it's much easier to go from
17 the small to the large. And the studies that we've been
18 doing at the FTC have shown that, say, for example, when
19 you're using census data and industry-level studies,
20 you're missing a whole lot that's going on at the
21 individual level, and I think you ultimately learn a lot
22 more by going as narrow and as case-specific as
23 possible.

24 COMMISSIONER KOVACIC: Mike?

25 DR. SCHERER: I somewhat disagree. What's the

1 value of anecdotes? As Zui Griliches used to say, "The
2 plural of anecdote is data." The humor of that escaped
3 you.

4 DR. WINSTON: Wasn't it Stigler who said it?

5 DR. SCHERER: Maybe he learned it from Stigler,
6 I don't know.

7 In any event, you have got to do all this stuff.
8 You have got to do case studies. You have got to do
9 data. You have got to integrate all the case studies.
10 All of these things need to be done in order to get
11 something like generalized knowledge.

12 Well, I guess that's all I'll say on that.

13 MR. HEYER: Jon?

14 DR. BAKER: Well, my reaction to this and to
15 some of the other comments here is that I think the
16 economics literature has been a little bit -- I have a
17 different perspective, shall I say, on the development
18 of empirical IO, which is that one of the big movements
19 has been away from cross-industry studies, which have
20 all sorts of problems that people here have described,
21 to individual industry studies, where you can learn
22 about -- which effectively control for lots of the
23 differences across the industries. There's been a lot
24 of learning about individual industries.

25 I'm just thinking of all the studies in Tim

1 Bresnahan's IO Handbook chapter, Peter Reiss and Frank
2 Wolak have a recent chapter that surveys a bunch of
3 studies, too, and there is just a wealth of knowledge
4 that -- the unit of observation in empirical IO has
5 shifted from the economy as a whole, across all
6 industries, to individual industries, and we've learned
7 a lot. Even when those structure-conduct-performance
8 studies are still done, they are all done largely on
9 related industries, as with the Leonard Weiss book I'm
10 thinking of from a while back.

11 You can use what you learn about individual
12 industries too, as I was saying before, to create
13 presumptions about related industries that you can argue
14 about what you know about retailing from retailing
15 industries and how it works. I'm thinking of Dean
16 Schmalensee's testimony in Microsoft. He was talking
17 about how software markets have certain kinds of
18 competition generally and that that observation probably
19 applies to operating systems. Then the Government comes
20 back and says, well, maybe that's an exception. The
21 presumption frames the analysis appropriately.

22 So, there's a lot you can do with individual
23 industry studies to learn about related industries that
24 I think we're undervaluing here.

25 COMMISSIONER KOVACIC: David?

1 DR. REITMAN: I just want to add that I think
2 you have to recognize that Section 2 cases are just
3 distinct from other kinds of antitrust cases in how
4 unique the behaviors are from case to case. So, it's
5 hard to generalize from, for example, our merger
6 analysis, which has benefited greatly from being able to
7 go back and forth between cases and theory and getting a
8 body of theory, which can then identify the cases and
9 the time.

10 There is so much individuality to any particular
11 set of bundled discounts, where a particular mechanism
12 that a firm predates, it's hard to see that even
13 generalizing from case studies or whatever is going to
14 add a whole lot to the analysis of a particular case,
15 even if it's necessary to some extent for the law. As
16 far as the analysis goes of what's going on in a
17 particular industry, I'm not sure how you can use that
18 very well.

19 COMMISSIONER KOVACIC: David, if I could follow
20 up on that, as you reflect on your experience with the
21 two cases you discussed, and if you were looking ahead
22 to try to extract more general observations from those,
23 is there something about an investigative methodology or
24 an analytical approach that you might derive from those
25 experiences?

1 Suppose you were thinking at the time you left
2 the Division about how to leave behind or to make more
3 concrete know-how that you had extracted from your
4 experience analyzing the cases and as a potential
5 testifying expert. Are there specific lessons that you
6 would have derived from those that you think would have
7 informed the analysis that you would use in future
8 cases?

9 DR. REITMAN: Well, the clear one I think is
10 from the Dentsply case, that the survey that we did
11 there seems to be fairly rare, at least on this side of
12 the Atlantic, although if you go across to England and
13 Europe, it seems like it's fairly routine as part of a
14 gathering of consumer information to do it
15 systematically through a survey, and the survey really
16 is just that, it's -- instead of interviewing a bunch of
17 customers, it's a way of systematically getting a
18 representative sample and asking the same sorts of
19 questions in a way which could be quantitatively
20 analyzed, and so I think that technique was helpful in
21 Dentsply. It could be helpful in a lot of
22 monopolization cases.

23 COMMISSIONER KOVACIC: Do you have an impression
24 about the arena in which, in many ways, so much of the
25 information we're talking about ultimately has to be

1 applied? Was the decision of the trial court simply to
2 reject the empirical study that had been done? Is that
3 just an outlier that we're going to encounter when we
4 bring cases? Or is there something to be learned there
5 about how to present evidence in a way that ensures that
6 it doesn't simply die at the doorstep of a preliminary
7 motion but makes its way into the resolution of the
8 case?

9 MR. HEYER: Objection, calls for a legal
10 conclusion.

11 DR. REITMAN: There are certainly things to be
12 learned there about how to actually conduct the survey
13 in order to be able to get through the hurdles of
14 reliability that the Court needs and rightly should
15 require. I don't think the analysis in the Court, at
16 least in Dentsply, really went beyond that, and so I'm
17 not sure what further lessons, but I do think you can
18 get over that hurdle. There may be additional hurdles
19 in terms of different sides looking at the same evidence
20 and, you know, making different conclusions from it and
21 the Court trying to figure out what to do with it and
22 such that we will have to wrestle with later, but the
23 first hurdle in terms of getting things admissible I
24 think you can overcome.

25 DR. WINSTON: I would just -- one thing, and you

1 can probably enlighten me on it, the whole discussion is
2 sort of taking place in a political vacuum, you know,
3 it's like antitrust policy proceeds, you know, that we
4 do the analysis right, find out what's going on and
5 bring the case. I mean, obviously all this proceeds
6 with a lot of political constraints and, you know,
7 within your department, you know, how you want to frame
8 the case, the kind of people you want to bring in, the
9 cases you want to go after.

10 I mean, I think all the things that Mike was
11 saying I agree with completely, that you want to draw on
12 as much evidence as possible, different sources,
13 different people, but all of this is constrained by just
14 political forces within and outside your agencies, and,
15 you know, how you grapple with that ultimately may be as
16 important as any of the analytical things that you
17 solve.

18 MR. HEYER: Do you want to take this one?

19 COMMISSIONER KOVACIC: What forces would those
20 be?

21 One reason that the FTC's anniversaries are
22 interesting to me is that my own appointment is tied to
23 the 26th of September. As the sands go through the
24 glass, I have five years before the appointment comes to
25 an end. So, one question for me, given that I have

1 perhaps a bit more influence in how decisions get made,
2 is how the agency should invest its resources. One
3 possibility that Mike referred to before, and it's
4 implicit in the comments that all of you have made, is
5 that one way to begin to use empirical methods to assess
6 the appropriate course in future policy making is to
7 examine past decisions to enforce or not to enforce.

8 As Mike said before, my first assignment at the
9 FTC in 1979 was to work with a young Assistant
10 Professor, Tim Bresnahan, in the formulation of the
11 Xerox study. I think in principle that any institution
12 ought to go back and look at completed matters, and for
13 purposes of some public discussion and revelation,
14 should make the results of that process available.
15 That's clearly a sensitive matter and I suppose
16 political in this sense: How do you develop a norm or a
17 standard that encourages ex post review in a way that
18 does not raise suspicions that you're picking topics for
19 study or examination simply to show up your predecessors
20 or in some way to reinforce a predilection or set of
21 preferences that you brought to the process?

22 I think we could agree generally that there are
23 tremendous methodological challenges in doing such
24 studies well. I don't put those aside as being
25 insignificant by any means. There would be a difficulty

1 in implementation.

2 My own preference would be that you would try to
3 develop an internal norm that puts money in the budget
4 every year to do that kind of work -- that is, that some
5 of it be done every year, that there be an expectation
6 such that outside observers would ask every year. "What
7 matters are you going to look at this year? Which
8 projects are you going to launch this year?"

9 Second -- you can't model this in a formal way,
10 this is simply a matter of leadership and choice --
11 incumbent leadership would be willing to pick matters
12 that could be sensitive to them. For myself, if I were
13 to pick mergers, I would be quite happy to see in the
14 relatively near future (that is, during my time here),
15 an examination of the cruise lines decision. I was
16 general counsel here when that transaction took place.
17 The FTC and three other jurisdictions studied the cruise
18 lines merger. I'd like to see if we got the answer
19 right. I'd also be interested in taking other matters
20 where we intervened and failed, Arch Coal being one.
21 I'd also like to take up the possibility that Jon
22 mentioned, that is at least with respect to the case
23 study component of matters, that there always be an FTC
24 6(b) matter in progress; that is, that it always be part
25 of the research agenda, perhaps with the possibility,

1 again, of using it to examine somewhat more
2 microscopically matters in which the agency intervened
3 and did not intervene.

4 To do that in a way that creates confidence that
5 it is being done in a technically acceptable and
6 even-handed manner requires a great deal of political
7 skill and judgment. One needs to make sure that the
8 evaluation process is perceived internally and
9 externally as being a neutral, truth-seeking exercise
10 rather than in some sense as a political exercise.
11 That's one thing an agency can commit itself to do.

12 The further question would be, what's the right
13 forum? Should something be done intramurally? Should
14 these be partnerships with academic institutions, or
15 think tanks, such as the AEI-Brookings Joint Center on
16 Regulation? Should it be done with specific centers of
17 research within the university community? What are, in
18 the language of international relationships, the
19 modalities for doing this kind of work? How it should
20 be conducted is another issue. To do it well and in a
21 way that would be regarded as a neutral, truth-seeking
22 exercise, as opposed to simply an effort to vindicate
23 one's own judgments or to discredit the judgments of
24 one's predecessors is politically a very delicate
25 matter. It would also be a politically delicate matter

1 to take one other matter we have mentioned here that's
2 of keen interest to me -- to look at the question of how
3 the antidumping system serves as the punishment
4 mechanism for cartel coordination. To even begin to put
5 a toe in the water in that kind of research work would
6 require a great deal of care to see how warm the water
7 was and to decide in what part of the pool you are going
8 to step in first. As a general matter, I can't help but
9 think that it's impossible to look at the question of
10 cartel coordination at home and abroad without
11 accounting for that.

12 DR. FROEB: Based on the kind of studies we did,
13 you can't learn something from every follow-up study,
14 and I think it's really important to be opportunistic,
15 and I think Mike made a study of the Appellate Court
16 decision overturning the must carry laws provided a
17 really nice natural experiment where we could learn
18 something, and being opportunistic on something like
19 that, it takes a lot of judgment about are we going to
20 be able to learn anything from this? We've talked about
21 the difficulties of counterfactuals, and I think you
22 have got to be very careful about that.

23 MR. HEYER: Let me raise another question for
24 folks to talk about that was touched on earlier,
25 particularly Professor Scherer got into it when talking

1 about innovation and dominant firms.

2 In trying empirically to get at some of this
3 stuff, the effects of remedies, the performance of
4 dominant firms, I was wondering if there's anything we
5 can usefully do empirically having to do with more
6 long-run issues, incentive issues for firms to become
7 dominant or for firms to be acquired by dominant firms,
8 perhaps? I think Professor Scherer had suggested
9 that -- seemed to suggest, at least, and maybe I'm
10 reading it wrong -- that maybe the harms from
11 constraining some of the larger firms, at least in the
12 innovation arena, might not be too great, might be worth
13 it, you could get short-run benefits, long-run maybe as
14 well, but we can't tell.

15 I'm wondering if we know anything about long-run
16 effects, whether anything empirically can be done in
17 that area.

18 DR. WINSTON: Well, there, whatever you do, you
19 are going to have to interface the patent system just in
20 general with technology policy in this country. In
21 other words, you know, what you first want to start with
22 is, you know, just positive economics, you know, how is
23 it -- we understand innovation, which is obviously very
24 important and a very difficult thing to do, and layered
25 on top of that is going to be, you know, technology

1 policy, and just it does have an influence on that.

2 So, you know, whatever you are going ahead with,
3 you just want to caution yourself that your answers are
4 going to be shaped to a large extent by the
5 institutional environment that exists in this country.

6 DR. SCHERER: It should be done. It is really
7 hard. Obviously the longer time frame you deal with,
8 the more historical artifacts you have to factor in. I
9 think the way you get around that is to look at a broad
10 array of cases and try to see how did it work in one
11 case and not work in another case.

12 A really interesting one to study, I do not
13 think it has been studied, is the United Shoe Machinery
14 case. United was dominant in inventing and developing
15 shoe machinery, but Judge Wyzanski found them guilty of
16 monopolization around about 1955 or so. I happened to
17 interview them in a quite unrelated context in 1958, and
18 they said this was a case where we really had the wrong
19 policy. Wyzanski said I'm not going to break them up
20 now, and there were good reasons for not breaking them
21 up, but I am going to leave the Sword of Damocles
22 hanging over their heads. We will come back five years
23 from now and see whether they ought to be divested.

24 And so here's USM sitting there with this
25 possible divestment if they don't get their market

1 shares down in the future. So what did I find in 1958?
2 They were saying, we're not putting our R&D into shoe
3 machinery. We're putting it into diversification
4 activities. And what then happened -- and again, it's a
5 big fast-forward -- what happened eventually was that
6 they became noncompetitive in the shoe machinery
7 business. Italian firms, maybe they would have done so
8 anyway, Italian firms became the leading suppliers of
9 shoe machinery in the world, and United Shoe Machinery
10 gradually just declined to nothingness.

11 We ought to be studying cases where we clearly
12 failed as well as cases where we think we might have
13 succeeded.

14 DR. MULLIN: And this doesn't give a specific
15 methodology, but some insight might actually come from
16 the kind of, you know, cross-industry comparison or at
17 least looking at the experience of other industries,
18 even ones in which we don't think there's some problems
19 with competition. So, for example, you know, Scott
20 Stern and Josh Gans have a series of papers about
21 basically licensing in biotech, as they say, licensing
22 the gale of creative destruction. Before you look at
23 the data, you might think, oh, they are these small
24 people, they are going to come up with something that's
25 going to leapfrog Lilly or something like that, a Lilly

1 product, but in actuality, what they will end up doing
2 is end up being acquired through some sort of licensing.
3 Effectively their competitive advantage is innovation
4 and not dealing with regulatory hurdles, et cetera, and
5 it makes more sense for it to be joined with incumbent
6 pharmaceuticals.

7 Now, once again, you might imagine that a
8 different world where Lilly would shrink because it's
9 been leapfrogged by competitors, but by the same token,
10 you know, presumably the current system leads to
11 innovation at the biotech level because they basically
12 know they have got this opt-out in terms of an external
13 capital market. They know if they get a hit, they are
14 going to be acquired and they don't have to go through
15 the whole costs of taking the drug to market themselves.

16 DR. SCHERER: Absolutely right. My daughter is
17 research director of a small biotech startup, and she
18 knows she can't -- if they go into Phase II testing that
19 her firm can't do it. So, they expect either to license
20 out or be acquired.

21 COMMISSIONER KOVACIC: To what extent is the set
22 of institutional arrangements by which agencies actually
23 bring and prosecute cases something that has to be
24 examined as well? I think that many of you, if not all
25 of you, have been involved in litigation episodes,

1 either inside the agencies or outside the agencies. I
2 was struck at David's comment about how in the course of
3 American Airlines the basic intuition that led to the
4 decision to prosecute remained the same over time, but
5 perhaps the understanding of why it was a good case may
6 have changed in significant respects over time.

7 I suppose in any one instance, in deciding to
8 prosecute any one case, the agency not only makes
9 decisions in general terms about whether there's a
10 sustainable theory, but has to make decisions about
11 whether to gather information, what information to
12 present, what is ultimately going to be persuasive to a
13 reviewing tribunal.

14 One element of the equation that we have to
15 consider not simply the functionings of specific firms,
16 industries, and economy as a whole, but the means by
17 which agencies themselves formulate and present cases
18 basically the mechanism by which theories and ideas are
19 ultimately transmitted into specific cases and how those
20 cases are pursued.

21 DR. WINSTON: I mean --

22 COMMISSIONER KOVACIC: There are larger
23 questions of institutional capability.

24 DR. WINSTON: And/or institutional constraints.
25 I mean, there has been some political economy literature

1 about the role of Congress or, you know, funding sources
2 and how they affect what the agency does. There was
3 a -- I can't remember, but a while ago, wasn't there a
4 study on -- saying how FTC cases were influenced by
5 Congressional funding in terms of, you know, you weren't
6 going after cases or areas where somebody was high up on
7 a committee in Congress because that could affect your
8 funding? That kind of stuff has been around for a
9 number of years.

10 COMMISSIONER KOVACIC: Yes.

11 DR. WINSTON: I haven't seen recent work on
12 that, but, you know, there's that kind of political
13 economy reality in terms of your dealings with Congress
14 and the President, of course.

15 COMMISSIONER KOVACIC: But I'm saying that, even
16 in the instances where you've decided to go ahead, one
17 key variable is the skill, the shrewdness, with which
18 the institution actually pursues a given matter.

19 DR. SCHERER: Let me say, my greatest failure.
20 Because I had a long connection with Detroit, when I was
21 director of the Bureau of Economics in the seventies, I
22 put very high priority on beginning an investigation of
23 the automobile industry. It was clear they were headed
24 for trouble. Who was it? I think it was Cliff who
25 talked about how -- yeah, Cliff talked about the

1 dynamics that got GM and Ford into their present pickle.

2 Well, it was clear already in the seventies that
3 they were heading for trouble, and the objective of that
4 investigation was not primarily to bring an antitrust
5 case; it was to illuminate to the public and to the
6 Congress what was going on, and the whole thing failed.
7 If we had succeeded, I think we might have avoided some
8 very serious mistakes. The industry might have learned
9 some things, the public would have learned some things,
10 the Congress would have learned some things.

11 I didn't see that case going into litigation. I
12 saw it as performing the FTC's historical role of
13 telling the public what the hell's going on in American
14 industry.

15 COMMISSIONER KOVACIC: Jon?

16 DR. BAKER: I was going to add that in the paper
17 I alluded to before with Tim Bresnahan, we talk about
18 two ideas for increasing the institutional capacity of
19 the traditional system to use economic learning, one of
20 which is to think about limited rules for neutral
21 experts, and another is for the enforcement agencies,
22 particularly the economists, to identify and codify
23 relevant generalizations about industries from the
24 empirical economic literature and make that available to
25 courts.

1 You all do try to do something sort of like that
2 in Schering, essentially in that whole line of cases
3 where the FTC is effectively relying on the idea that
4 generic drugs, when they enter, the price goes down for
5 the brandeds, and you're thinking "what can we learn
6 from that about the importance of generic entry to
7 create a presumption about why practices that might
8 discourage generic entry would be a problem?" Well,
9 taking generalizations like that and writing reports and
10 having that available for courts is a way to increase
11 everyone's institutional capacity.

12 DR. SCHERER: The fact is that the FTC's report
13 on generic drug entry and patent extension strategies by
14 branded drug firms was superb.

15 COMMISSIONER KOVACIC: I guess the humbling
16 thing for me is Schering. The investment in the
17 generic drug study was a major decision of Bob
18 Pitofsky's in 2000 to start the project, handing the
19 baton to Tim Muris, who made a major decision to
20 continue to devote resources and make it a high
21 priority. I think the study was enormously illuminating
22 and an excellent example of how 6(b), which we have
23 talked about before, ought to be part of the
24 Commission's portfolio.

25 I am not asking everyone to accept the wisdom of

1 the Schering case on the merits (though I think you
2 should), but you had decades worth of FTC activity in
3 this area, you had the FTC's investment in the empirical
4 study in question, and you had related work that the
5 Commission had done. All of this was presented to the
6 Court of Appeals, and the FTC received exactly the
7 amount of deference that a wayward child would receive
8 from a parent, which was none at all. The decision of
9 the administrative law judge was accorded great
10 deference.

11 On the other hand, the decision of the
12 Commission, with this affiliated research, received
13 none. What is humbling when one walks into difficult
14 areas of analysis of this type, internally we have to
15 ask, I think, are we bringing to bear the assembled
16 knowledge in an effective way for a reviewing tribunal?
17 You don't get something very far saying, well, that was
18 an error by the Court; there's another erroneous court.
19 Yet another court has failed to get it right. They
20 ultimately are the gatekeepers we have to work with.
21 But in this instance, that was unsuccessful in a fairly
22 traumatic way.

23 MR. HEYER: One process point that I think might
24 be worth considering, although I'm not quite sure how to
25 get this in front of whoever makes the determination, in

1 talking to some international folks, they have a process
2 in some jurisdictions where they actually have the
3 testifying economists, maybe even the consulting
4 economists, the Court essentially has them discuss,
5 debate, reach consensus with one another on things that
6 they can agree on and things that they still disagree
7 on, and to some extent it helps cut through a lot of the
8 confusion that any layperson or court is going to face,
9 and, you know, there are going to be some remaining
10 differences, but that seems like it might be an
11 efficient thing to do, perhaps within the Division or
12 the FTC and perhaps within courts as well, to have that
13 sort of process.

14 DR. BAKER: Let me make a comment. I want to
15 advertise something else now, which I was the --

16 MR. HEYER: It's not another article, is it?

17 DR. BAKER: No, no Tim Bresnahan on this one.

18 I was co-chair of a task force of the Antitrust
19 Section of the American Bar Association on which Luke
20 participated last year the Economic Evidence Task Force.
21 We did a long analysis of various options like these and
22 laid out some pros and cons. We didn't reach a
23 consensus as a task force on it, but I think you would
24 find it very interesting and instructive, and I believe
25 if it is not now it will soon be available on the

1 Antitrust Section web site for everyone to take a look
2 at.

3 DR. SCHERER: Actually, I had an experience, I
4 was hired as an expert by Judge Will in Chicago on the
5 glass bottles case. Part of my task was to do what you
6 suggested. Individually I met with the experts from
7 each side, posed questions that essentially went to
8 their differences, and tried to see what areas of
9 agreement could be found and what new research or what
10 new analyses could be found that might illuminate the
11 differences. We got pretty close to getting a rational
12 settlement of the case, except that one economist on the
13 final day of testimony strayed from the chosen --

14 MR. HEYER: The script?

15 DR. SCHERER: -- chosen path, and then so turned
16 off the jury, the jury so disbelieved him, that although
17 he was right on the merits, they disbelieved him and
18 rendered a verdict that was totally nonsensical.

19 COMMISSIONER KOVACIC: I know we are close to
20 the end of our time for today. I had a couple of
21 closing remarks for the session, but I wanted to give
22 our panelists another minute or so, if you have other
23 thoughts you would like to bring up.

24 DR. MARSHALL: Well, I just had one comment
25 about the implied -- well, the suggestion that you had

1 implied, Bill, regarding the funding of research
2 programs coming out of either the FTC or the DOJ. I'm
3 not savvy about the political nature of all of that. I
4 am generally quite happy with what I see coming out of
5 the academic literature since I am not one to look down
6 at the shoulders I am standing on and speak pejoratively
7 about where I'm resting, but I think that if the DOJ and
8 FTC were to somehow jointly put forward data that was of
9 remarkable quality, you can move research programs that
10 way.

11 The academics will latch into rich sets of
12 quantifiable information and coordinate on that if it is
13 good enough. If they see that there is lots of economic
14 content in there that they could never get their hands
15 on otherwise, you will move research programs that way,
16 and that doesn't require creating some kind of, you
17 know, NSF-like program within the FTC/DOJ.

18 COMMISSIONER KOVACIC: Other closing thoughts?

19 (No response.)

20 COMMISSIONER KOVACIC: Ken?

21 MR. HEYER: No, I just wanted to thank everyone
22 again. I learned a good deal, and I know it's not an
23 easy matter to come to something like this, and on
24 behalf of the others as well, I wanted to thank
25 everyone.

1 COMMISSIONER KOVACIC: As Ken did earlier in
2 thanking June, Joe and the team at the Department, I
3 want to thank the folks at the FTC who put this session
4 together. Those of you who have ever organized
5 anything, even a discussion around a lunch table, know
6 that this doesn't happen automatically. This takes an
7 incredible amount of work by the organizers. Jim
8 Taronji, Pat Schultheiss, Doug Hilleboe, Elizabeth
9 Argeris, and David Balan at the Commission were the
10 folks who along with June and Joe, Ken, put this session
11 together.

12 I also want to thank the speakers again. In
13 some ways, to ask what we've learned, what we would like
14 to know, and how we go about learning what we like to
15 know are impossibly difficult questions to address in a
16 short period of time. To do this, we could only ask
17 people whose skills were equal to doing the impossibly
18 difficult. That's why this group is here. I want to
19 thank them for taking their very precious time to share
20 their ideas with us today.

21 I'm grateful for everyone's willingness to have
22 this session today. I think that it is truly the
23 marriage of theory and practice that is so important to
24 formulating good policy. I think that the empirical
25 dimension, both the broader scale inquiries using the

1 taxonomy that Cliff laid out for us, from the broader
2 economy-wide perspective down to the industry-wide
3 level, to the firm-wide level, down to cases, is a mix
4 that's very important to what we have to do.

5 Perceptions of the past deeply influence current
6 views about what policy should be. In many ways, they
7 set the presumptions about what policy is today, not
8 just at home but also abroad. There are interesting
9 opportunities to embed within agencies, and I speak of
10 my own institution, a norm that makes this a routine and
11 significant part of our agenda, every bit as important
12 as bringing the cases; doing the research on which cases
13 rest, looking at past enforcement events or
14 nonenforcement events as a way of considering the way
15 ahead, collaborations with researchers on the outside,
16 maybe the idea, on a limited basis, of regularly
17 convening a workshop at which promising empirical work
18 or promising paths of work are done, something that can
19 be done inexpensively in an illuminating way, and the
20 possibilities that we haven't talked a great deal about,
21 though we have touched upon some, for cross-border
22 comparisons.

23 It's also striking to see the number of academic
24 centers like Bob's, like the joint project that Cliff is
25 so deeply involved in, that have counterparts in Europe

1 where, week-in and week-out, at different centers,
2 interesting research along these lines are being done,
3 so that what work was done might have a truly
4 cross-border dimension to it.

5 I'm fond of the title that Earl Weaver chose for
6 his autobiography: It's What You Learn After You Know
7 It All That Really Counts, and that's why continuing
8 attention to doing good empirical work strikes me as a
9 day well spent.

10 Thank you all.

11 (Applause.)

12 (Whereupon, at 12:33 p.m., the hearing was
13 concluded.)

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1 C E R T I F I C A T I O N O F R E P O R T E R

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9 FEDERAL TRADE COMMISSION to the best of my knowledge and
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18 C E R T I F I C A T I O N O F P R O O F R E A D E R

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20 I HEREBY CERTIFY that I proofread the transcript
21 for accuracy in spelling, hyphenation, punctuation and
22 format.

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