REMARKS ON SINGLE FIRM CONDUCT

Panel Discussion
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Proceedings

Greg Sidak: My name is Greg Sidak and it's my pleasure to moderate this panel on single firm conduct. We have very distinguished economists and lawyers on the panel today, their biographies are included in the materials that you have. In the interest of time, I won't go over that again now. George Cary, Dennis Carlton, Mark Popofsky, Ron Stern and Doug Melamed. The format will be as conversational, as spontaneous as possible.

I would like to reserve enough time for you in the audience to ask questions as well. We will have one prepared presentation by George Cary but otherwise, I will toss out some questions to get the conversation going and it will be as interactive as possible.

Just as an overview, I would like our panelists to think about the following categories of questions—what are the normative objections of Section 2? Do we have confidence in the market definition and market power analyses that are applied in monopolization cases? Is Section 2 jurisprudence robust with respect to new business models, new ways of producing products? Should Section 2 jurisprudence contain more safe harbors and, if so, how should they work?

Then drilling down to more specific issues, if we can glean some general principles, how do they apply to some of the more technical issues that are currently at the forefront of Section 2 litigation: bundled discounts, tying, product design, price squeezes, refuses to deal, standards setting. Beyond that, what about remedies for single firm conduct?

Do we need some clarification here on the part of the antitrust enforcement agencies and are we doing enough to evaluate the efficacy of remedies in Section 2 cases so that we have a better way to select Section 2 cases going forward and so that courts can screen meritorious from unmeritorious cases in a better way? And finally, in terms of case selection, what should the antitrust enforcement agencies be doing, what should the Supreme Court be taking in terms of the next Section 2 case?

With that as an overview, let me start then with this question about normative objectives of Section 2. What should be the purpose of Section 2? How should some of the welfare criteria that we heard about earlier this morning play into that, issues of static versus dynamic efficiency? Doug, why don't you lead off, because I know that you have some strong views on this.

Doug Melamed: I have strong views and that's a very important question. I'm not sure what the answer is. It's an important question because it's my sense that when one reads the cases and reads the commentary and looks at the largely unintelligible morass of Section 2 law, that the differences and the unsolved problems are rooted not so much in analytical differences, whether post-Chicago or Chicago School or whatever, but rather in a failure clearly to articulate and to agree upon the objectives of antitrust.

Is it consumer welfare? Well, if it were consumer welfare then it's a pretty shaky empirical basis, for example, that would say that refusals to deal might be lawful. Because certainly refusals to deal, at least in the static sense, are going to benefit consumer welfare. More likely, therefore I think to the extent that we're focusing on economic welfare, it's aggregate, long-term dynamic welfare, not entirely clear whether it's consumer welfare or producer or total welfare.

But even there, I'm not sure that that accurately describes the objectives of antitrust. Let me give you a hypothetical. Suppose a company invests in a better mousetrap or let's say a less costly means to produce a mousetrap that is five percent less costly to produce than all of the existing mousetraps. And in perfectly lawful above cost pricing, becomes a monopoly and then facing no competition, raises prices by 300 percent to the monopoly profit-maximizing price. No one enters because they all know that if they did, it could lower prices again and he still has the low cost process.

In the long run, total welfare and consumer welfare might be significantly reduced by this sequence of events. I think it's quite clear that U.S. law provides and ought to provide that that conduct is not illegal. Now you could say it's not illegal because, although welfare maximization is our objective, we have a kind of rule of expediency that says we're not going to engage in that kind of long-term speculation. And if the conduct looked appropriate, in the shortness of life, we're going to say it's lawful. You could say it's illegal, by the way.

I think Steve Shallot might say you have to balance it and if you know that was going to happen, you would condemn the invention. But I think there is a strong case to be made for the proposition that as a normative matter, if the competition was competition on the merits, and we'll leave what that means for a later discussion, if it is skill, foresight and industry, the defendant is entitled to the fruits of it. Not because we don't have the capacity to know which of those cases will reduce welfare and which will enhance welfare, but because as a normative matter, our law says it's okay, you're entitled to that because the ultimate principle of our law may well be not maximizing welfare, but inducing competition on the merits.

Greg Sidak: On this question of maximizing welfare, Dennis, what are your thoughts about that mysterious sentence in the *Weyerhaeuser* case that we heard about earlier this morning?

Dennis Carlton: Well, I think I agree with what Doug said that you have to formulate a dynamic, sort of long-run objective function. People typically take that to be the maximization of consumer welfare by consumers. Alternatively, you could say it's the maximization of social welfare, including producer welfare. For most cases, I don't think it matters much which of those two objectives you choose, they won't be in conflict. If a merger creates more efficiency, it's likely to create benefits for consumers too. So it's likely to pass on some cost savings. So usually they are not different standards.

But what's interesting about the *Weyerhaeuser* case, to me, is it's a good example of a study of possible monopsony, what economists call monopsony, when there's a single buyer. And if you focus on monopsony, it reveals that those proponents who claim that the objective of antitrust is solely maximization of consumer surplus rather than total surplus, can't possibly be right.

What monopsony is, is a single buyer exerting market power to restrict the purchase of some input. We know as economists, there's no question asked, you teach this in a basic course, that creates the same deadweight loss as a monopoly restricting its purchases. The notion that you have to trace it through to some consumer harm is not part of what you would teach in an introductory course, nor is it necessary. You can easily imagine a one company town, the sole employer of people, and he's a monopsonist.

If there had been previously two factories and they merged and became a monopsonist and that then allowed them to restrict the number of workers they hire and pay them a lower wage, that's how monopsony works. And then sell their output in a competitive market, that would create a deadweight loss. Economists would be against it. So I always take that observation as an observation that anyone who says they are just maximizing consumer welfare as the sole criteria of the antitrust laws really can't mean it, because then you would be in favor of a buyer cartel, which I don't think anyone is.

Now the *Weyerhaeuser* case kind of, depending on how you read some of the sentences about—well, I don't like monopsony because it trickles through to consumers, that's not really a very precise way of articulating what economists' objectives to monopsony are. A more precise way is monopsony is the exercise of market power on the buying side, creates a distortion—that's a harm to the economy as a whole.

Second, I'll be brief, is that the recognition that certain efficiencies, say in a merger, can be of the fixed cost nature and not affect marginal cost, is something that, for example, the Antitrust Modernization Commission that I was on recommended that people pay attention to. If you are only interested in consumer welfare, especially in the short run, if it's a fixed cost savings on a marginal cost savings, it may not affect price.

Over the long run, though, our belief is that fixed cost savings do eventually trickle, have an effect on consumer pricing and therefore you should be in favor, even if you only like consumer welfare. But if you like total welfare, you definitely should take account of fixed cost savings. I should have mentioned, should have started with a disclaimer that anything I say are my own views and not necessarily those of the Department of Justice.

Greg Sidak: To what extent do recent developments in European law under Article 82 help us to understand here in the United States what our normative objectives are under Section 2 of the Sherman Act? Ron, can I ask you to chime in on that?

Ron Stern: You can. It's a broad question and I guess my reaction to it is really focusing on the framework in which we look at competition. Are we really—we seem to have made progress, if you simply look at statements by the heads of the relevant antitrust or competition authorities, that the approach in both sides of the Atlantic is to focus on protecting competition and not protecting individual competitors.

But unfortunately, I think if you read back, scratch that topic sentence and look for the support, you quickly end up with a divergence. You end up still with an awful lot of the ordo-liberal approach in Europe where the notion of what you're trying to do is to protect a competitive market structure that has a number of equally sized, equally resourced firms, versus an approach that you are really pursuing efficiency, size and resource differences don't matter.

And I think until there is a little bit more consensus beyond the topic sentence between the U.S. and Europe, it will be hard to have rules that line up and that allow companies and counsel to operate in a global economy, where increasingly, you can't simply provide one set of approaches for the U.S. customers and another set of approaches for the European or global customers.

Greg Sidak: Is that concern over having to comply simultaneously with European law and American law if you're a multinational corporation effectively making Europe the tail that wags the dog for American companies? George, would you like to—

George Cary: I will speak to that. With all respect to Doug, Ron, I think that the divergence, the alleged divergence between the U.S. regime and the European regime is overstated. I think that going back to the normative question that you asked, I do think that there is a lodestar and I do think that it's consumer welfare. *Weyerhaeuser* and cases like that, the monopsony cases can be dealt with by crafting on as a secondary issue total welfare where it doesn't conflict with consumer welfare. Certainly if there is an increase in total welfare with no harm to consumer, antitrust laws ought to deal with that.

But the lodestar has been, at least for the last ten or fifteen years, consumer welfare is the bottom line. I don't think, despite what some people may say about particular cases in the EU, that the EU has rejected that lodestar in favor of a protectionist regime for European companies or for companies, competitors generally. I believe that their standard is consumer welfare. The U.S. standard has been, to some degree, eroded over some recent years and I'm sure that Doug will speak to this, with the concept of no economic sense or not profit maximizing, those kinds of concepts.

In my mind, those are shorthand, those are rules of thumb to be applied as rules of decision where the real goal is consumer welfare. So in that sense what I really think is going on between the U.S. and Europe is not a divergence as to the goals, it's really perhaps a divergence as to a preference for false positives versus false negatives. And in that sense, you see that kind of divergence right now, for example in the merger area I would say between the DOJ and the FTC maybe or between the current DOJ and the DOJ of Joel Klein, Joel Klein versus Charles James.

I think this is all a matter of continuum. I think the goals are the same, but whenever you have different enforcers, you are going to have different risk tolerance for different outcomes, and that is what the issue with respect to Europe is in my mind.

Greg Sidak: Mark, would you like to jump in?

Mark Popofsky: Well, just to actually go back to the question Doug raised about what are we doing here with Section 2, I think it's important to remember it's awfully important. Single firm conduct and this panel is called single firm conduct, not monopoly conduct, although Section 2 covers both and is concerned and they need to allow action, single firm conduct is ubiquitous. It happens all the time, it is like breathing.

So whether you have a preference for how you balance false positives and false negatives in a particular way, as George says, I think is extremely important. And even if there is a high level of agreement on the overall objective, long-run consumer welfare maximization as Doug, I think, glibly put it, how the means to get there matter. What instruments you choose matter.

The legal tests that companies apply when they are deciding to engage particular conduct—here, there, Korea, Taiwan, anywhere there is a potentially restrictive regime, by their lights, matters. So I think it's really important as we go through this topic to get from that high level agreement perhaps among ourselves to, as you were suggesting Greg, how do we get there.

Greg Sidak: Doug, I'm going to give you the last word on these cosmic normative issues and then we're going to get down to earth.

Doug Melamed: Just very briefly, an aspect of the difference between Europe and the U.S., I think is very important and has not been mentioned. Even apart from agreement on broad objectives, consumer welfare or whatever, you have the institutional and cultural context. In the U.S., we have a liberal tradition, the modest state. We have a capitalist tradition, trusted markets. And we have, at least for one of our federal agencies, a requirement to go to court to prove your case.

Those are important disciplines that cause the government to be rather modest in its intervention into the marketplace. In the Commission, you have a status tradition, you don't have the same kind of trust of markets. They don't have the same confidence that markets will self correct and they don't have the same disciplines, which I think is critical, on their fact-finding process. So they can talk about consumer welfare, but if they don't test their suspicions rigorously, they can reach some bad results.

Greg Sidak: Let's shift to the topic now of market and definition of market power. Dennis, can I ask you to give your thoughts on whether the market definition tools or the merger guidelines cross over very well to the problem of market definition with respect to single firm conduct?

Dennis Carlton: Sure, I actually wrote an article on this in *Competition and Policy International* earlier this year. The short answer is not really, and there are a few reasons. First, in some Section 2 cases, there's a difference between—the courts distinguish between market power and monopoly power. When I was at the AMC, I held a hearing on this, a roundtable of economists.

I think, at least my consensus is because of my prior feeling, is that this distinction is one that is very hard to implement. I mean, you can say that monopoly power is a lot of market power, but then what do you mean by a lot? And it's not a very precise distinction and that can cloud issues. When you turn to the idea of how you define a market, even the horizontal context where I think it's been pretty successful, there are difficulties, but those difficulties increase when you go to a Section 2 case.

And therefore you have to recognize that market definition, which I think that everybody always says, but sometimes when you get to court, it's not taken into account, is extremely crude. It's a place to begin; not a place to end. And people who insist on precise definitions of the market, you can't exactly draw the boundary lines, I'm going to throw you out of court. Those are people who misperceive the purpose of market definition in economics.

Let me explain why it's hard in a Section 2 case. In a Section 2 case, a bad act is alleged. As a result of the bad act, presumably you've created market power or you've increased your market power. Well, that says—just think about it for a minute, that what they should be focusing on is the change in market power. But they don't—courts usually don't focus on that at all.

Instead, looking at the change, they treat market power more as a screen; you have market power or you don't. If you don't have market power, I'm going to throw the case out. And that may be sensible, but then you have to say okay, how am I going to define the market? So what I've seen done in some cases is they use the analogy to the merger guidelines. The merger guidelines ask, can you raise price by 5 percent. They don't exactly say 5 percent, they say can you raise price and people typically use 5 percent if you are a hypothetical monopolist.

So some people say—okay, I know how to apply that type of approach to a Section 2 case. Start at the competitive price and I'm going to ask can this firm raise price by 5 percent. If you think about it for a second, that's a little odd. Do you know the competitive price? Suppose I tell you that the competitive price is $5.00 and the current price is $10.00. Why do you need to define a market, take market shares and do something complicated to say ten is bigger than five, therefore there must be market power.

Well, that is what you're saying is the right test. Or if you think about it a little, it's not exactly right to take the competitive price, even if you knew it, as the benchmark. Why? Even the merger guidelines don't take the competitive price as the benchmark, they take the existing price. So what you should do in a Section 2 case is take the existing price. Which existing price, before the bad act or after the bad act? Courts often pay no attention to that.

Technically if you think about it, probably it should be before the bad act. Is there market power before the bad act? If you use the price as your benchmark, the price that would exist post-bad act, which is perhaps the current price, you could be committing the cellophane fallacy. So to avoid that, you do pre-bad act, and you may not have any data on that. If you don't have any data on what it is pre-bad act, you're in a very difficult situation.

So perhaps the best you can say is I'm going to use the rule of thumb for a lot of very similar firms, I'm going to dismiss the case. But that is just rough rule of thumb and emphasizes what I said at the outset, that when you use market definitions and market shares to figure out if there is market power, you are really using a very crude device.

Greg Sidak: Any commentary on that from our other panelists? Ron?

Ron Stern: I would be happy to jump in and really from a very different angle. It's not so much to comment on or disagree with anything that Dennis said, I think he laid out a lot of the complexities very well. Really come at it from sort of the other end, which is granted that there are, there are complexities, I think one of the things that people sort of avoid talking about and focusing on when they are looking at a global picture and how to deal with single firm conduct is the importance of the screen of monopoly power.

You know, the ICN, the International Competition Network, along with the U.S. and the European Commission, are working on single firm conduct. And as far as they got last year was sort of doing a survey of what do the different jurisdictions of the world do today, kind of a stock taking. And one of the key things that came out of that, it's on the website, is the U.S. has this rule of thumb if you are looking at market structure that you need to have a very substantial share to be deemed to have a monopoly power as a rule of thumb, which gives you some translation as to how much market power.

We know that everyone with a differentiated product may have a little bit of market power at 70 percent or so. You generally—again, rule of thumb—can't even get into court on an attempted monopolization case unless you are sort of 40 or 50 percent or so. In the rest of the world, you are deemed to be dominant, if that is the term used, often in the sort of 33 to 50 percent range.

And then of course you've got this hybrid notion of collective dominance which kind of falls under an Article 82 kind of approach, even though it involves multiple firms and you've got that in the new Chinese law. So it seems to me that with all of the complications of figuring out what this concept is, I would urge people not to lose focus on the importance of sort of bringing together. Maybe it's the ability to price significantly independently, the sort of EC test.

If you really gave that teeth, might narrow the areas in which we then had to worry about all of the different kinds of exclusionary conduct or abuses. Because in fact you would find that most successful firms really didn't need the screen of having to worry about abusing their dominant position or engaging in monopolization.

Greg Sidak: George, did you have a comment on that?

George Cary: Yes, I was just going to follow up on Dennis's comments. I think that Dennis is exactly right in terms of the problem in Section 2. I also think there's a very practical problem, and that is that judges are just not prepared to put the name of monopolist on someone who controls only a very narrow segment of commerce.

So you have on the one hand the merger guidelines and that approach and the way the agencies are enforcing it going down to these multi-syllabic product definitions that really encompass very small gradations of similarity and differences between products within a space, like the super premium ice cream.

I think in a Section 2 context, lay judges are just not prepared to say that that is a market that can be monopolized. Now part of that is an undercurrent of the negative connotation of being deemed a monopolist. Part of it, I think, is simply maybe a subliminal emphasis on long-term dynamic implications of that kind of market definition, that there will be repositioning over a longer term, there will be new entry over a longer term. And therefore monopolization is not really an issue in such a narrowly defined market given the proximity of other competitors who could reposition their product.

And I think part of it is simply a conclusion that in the longer run, those kinds of market imperfections are going to be corrected plus there are justifications of some sort, efficiencies of some sort, that go along with the conduct being challenged. Whereas in the merger context, I think the courts are more willing to segment the efficiency analysis from the market definition analysis and make that market finding in that context.

Greg Sidak: Doug?

Doug Melamed: George's very interesting comment provokes me to just elaborate a little bit with a thought of my own. If you imagine a world in which the test for the conduct element of the abusive dominance for monopolization offense was something like conduct that made no economic sense but for exclusion or recoupment or profit sacrifice, something like that, then you would look at the market power requirement as a kind of belt and suspenders.

I mean, you wouldn't need it if you were 100 percent certain that the conduct made no sense but for exclusion and recoupment, you could infer that there must be market power. Maybe in a super premium ice cream market, the courts can't proceed because their tools are insufficient. So I guess what I'm saying is, if we have a robust conduct test, then maybe we don't have to worry so much about whether we have got market power and market definition down right, because it is a little bit redundant, at least the logic of the offense.

Male Speaker: I have one comment to make in relation to what Doug and George and to some extent Dennis said. When I look at the corpus of Section 2 cases, particularly the last decade since the Microsoft litigation, I do not see a lot of them rising or falling on whether monopoly power exists. To some extent, the courts seem to know a monopolist when they see one. And although Dennis raises a very important conceptual issue and to some extent, one of practical proof.

You know to me, the problem comes down to is the firm exercising enough market power to take what Doug was just talking about, to distinguish a mere firm market power from a monopolist. Because if we are just going to say it's a market power screen, are you engaging in conduct that makes no sense but for augmenting your power, we haven't done what Section 2 asks us to do, which is distinguish the ordinary firm with market power from the would be or actual monopolist.

And it strikes me that where the courts have really gone is to say yes, we see market power and we see a lot of market power, and that hasn't turned on what the scope of the market really is. I haven't seen a lot of Section 2 cases rise or fall on that issue. They seem to rise or fall on the conduct element. It may be in the next ten years we see all of them rising or falling on whether the firm is indeed a monopolist, but I don't see that happening as a practical matter.

Greg Sidak: Well, let's turn to the robustness of the analysis of conduct under Section 2. This is a—

Male Speaker: Can I just add one minor thing? I think, in particular, what Ron said about screens is very important in Section 2 cases. The reason I think that even though market share is very crude, it's still useful because it can get rid of a lot of cases that don't make a lot of sense at the outset, even though it is a crude tool and it's very hard to make precise what the market definition is.

But one of the alternatives, and this kind of follows up on something that Doug is saying, if the screen is no market power, let's throw it out and now let's look, you could actually have an alternative screen, which is what Doug is suggesting and actually I suggested also in this article that I talked about earlier and that is reverse the screen. This is the type of conduct that an economist would not want to attack. It's the type of conduct that generally is not anti-competitive. Leave them alone, don't have subsequent detailed inquiry if it's in a certain class of conduct. I think that also would be quite helpful.

Greg Sidak: Then on this question of the robustness of the evaluation of conduct under Section 2, let me toss out a few considerations about areas where the law might be having trouble keeping up with the way business are actually operating. What about instances where the single firm is deriving revenue from multiple sides of the market, two-sided or multi-sided markets, so they are ancillary revenue streams. For example, what does that imply about the applicability of our standard jurisprudence on predatory pricing?

If you're a Google or a Microsoft and you give away stuff for free, how do you apply *Brooke Group* in that context? What about non-profit maximizing firms, for example, a lot of hospitals are non-profits, the U.S. Postal Service is a non-profit and subject to antitrust law within the last year with respect to activities not covered by the private express statutes. To what extent does something like the recoupment test or no economic sense or profit sacrifice simply not correspond to the kind of analysis that is required to evaluate conduct in those situations?

What about our various kinds of cost-based rules for price floors, when you have multi-product firms and you do some sort of combinatorial evaluation of cost? Is our jurisprudence mainly based on the assumption of firms making a single product? And finally, in the wide variety of situations where there might be some kind of duty to deal imposed, we don't have much jurisprudence on the question of what the price ought to be. Are courts well equipped to do that, what guidance does existing Section 2 jurisprudence give us? Does anyone want to tackle one or more? Doug?

Doug Melamed: I think our existing Section 2 jurisprudence doesn't give us much guidance because our existing Section 2 jurisprudence is a mess. But it could. I think the question you asked to me points in the direction of one of the reasons that I think we need to have in Section 2 one or very few overarching principles that describe—and whether it's competition on the merits to find some way or whatever—that describe the permissible conduct. Because I think such a principle would be robust.

For example, in your multi-sided market situation, instead of thinking of predatory pricing in the old static one product market sense of *Verita* and *Turner*, average variable cost compared to price, you ask the following question: What were the incremental revenues attributable to the conduct in question? What were the incremental costs that wouldn't have been incurred but for that conduct, were those revenues less than the cost?

You could conceptually answer almost any of these questions and it may be a difficult problem to prove, to be sure, if you had some overarching principle, a normative principle like that. If you don't, if you have a series of discrete rules, here is a rule for predatory pricing, here's a rule for refusals to deal, then you get a case that doesn't fall into received category and *LePage's* I think was one, and the court just throws up its hand and does some gibberish because it doesn't have a signpost to guide it to the right decision.

Greg Sidak: Where do we look for guidance, then? It seems that implicit in your comment is the belief that the courts are not going to give us this Holy Grail. Do we look then to the FTC and the DOJ to write some guidelines on really hard to understand industries that don't fit into existing pigeonholes?

Doug Melamed: Well, I don't know. I'm a believer in the common law process. It seems to me if the agencies, for example, agreed on what the Holy Grail was and advocated it, maybe the courts—whether you agree or disagree, I don't know—the Supreme Court maybe should take some cases.

Male Speaker: I think your solution is part of the problem. I mean, you could have a scenario where the revenues are greater than the cost because the conduct created by incurring those costs creates market power. So in that scenario, your formula would allow for anti-competitive conduct under the guise of being—

Doug Melamed: I could take it a lot farther—

Male Speaker: But I think part of the problem is once you start tinkering with the formula, you end up with a mess.

Doug Melamed: Now look, here's the tinkering. The principle is, would the revenues that you generated leaving aside any market power you created by the conduct be sufficient to justify the investment in the conduct?

Greg Sidak: To push back a little bit on Doug, God forbid, the problem with applying this profit sacrifice principle everywhere is that it requires a baseline without the conduct. You have to know, as Dennis said in a different context, the benchmark you are starting with. And maybe, as Doug suggests, it's an exercise that will at least add some conceptual clarity so we have a starting point.

My problem is I can easily, as I guess George is saying, think of context where it's really hard to do. It's much harder than maybe a simple rule, like the rule of per se legality or per se illegality. It might be something very different. And this is sort of where I think we have this strange eclipse of John Thorne meeting Aaron Edlin, which is John agrees there can be circumstances where there is exclusionary conduct or conduct he would label bad. And he says the hard question is how do we get there?

How do we, as Justice Breyer once wrote when he was on the First Circuit, separate the procompetitive sheep from the anti-competitive goats? And Aaron says we haven't had much moderation lately. We have, to put words in his mouth maybe, the creep of cost and price based tests, the profit sacrifice principle. It is sort of taking all of Section 2 rendering the rest of it potentially vestigial.

The Sixth Circuit came down with a very interesting decision in this connection a few weeks ago that some of you may not have noticed, this en banc decision in the *NicSand v. 3M* case. And I think it's a very, very striking case. 3M was not a monopolist, it had, I think, roughly a 33 percent share. And the business people, like shades of *LePage's*, I guess 3M is very clever in what they do—decided hey, here's a great way to capture this automotive product market.

Let's offer some medium term long range exclusive contracts to the four major customers who are big box stores roughly. And that way, we will be able to capture all of the market from the incumbent and they will be out of luck, they won't be able to compete with our long-term deals, they will have to exit. And this is the plaintiff's story—we will have monopoly power. And lo and behold, the strategy worked.

For whatever reason, the incumbent firm, who was the plaintiff, who had almost 70 percent share, didn't counter attack with its own exclusive offers. 3M's strategy worked and ended up with a monopoly. The Sixth Circuit threw out the plaintiff's case on a motion to dismiss, folks, and said basically an industry-wide web of long term [indiscernible] deals, all hatched simultaneously did not state a claim because the plaintiff could have countered and the price offered was not below cost.

So we have, I think, an example of where the best of intentions—and I think Doug's grand unified theory of profit sacrifice is well intentioned, it has a lot of conceptual appeal. The creep of it is probably having some undesirable overspill. And again, where John Thorne meets Aaron Edlin is I think we have to trust in the common law process, as Doug said, to find the situations where we say—well, this principle might apply, but only so far and we're going to do the tough work of trying to find the right rule for the case here.

Greg Sidak: Ron?

Ron Stern: Sure, I would just take a second to comment. I admire Doug's search and if we could come up with something that covered everything and people were willing to broadly accept and people understood what it meant, that would work. But I'm a little skeptical that we end up with competition on the merits, which we of course know means different things to different people.

Some people will say the competition on the merits is offering bundles of products at different prices if you have multiple products. That's competition on the merits, it's the rough and tumble of the marketplace. And another place is they would say no, competition on the merits is offering your individual product at an individual price against everyone else who has an individual product.

I think it's really much more important that we keep looking maybe for this Holy Grail, but in the interim, that we quickly develop safe harbors, rules of thumb and the like as Mark, I think had suggested in his article. So that we can provide as much guidance and as much clarity so that businesses essentially don't have a problem either here or globally pulling their punches for fear of uncertain rules.

Dennis Carlton: If I could just comment. I think there is an overarching principle to Section 2. It's easy to state. You want to maximize long-run social or consumer welfare. So it's easy to state it; it's hard to implement it. And what we are really looking for are implementable rules, so Doug has given one.

But the hard question is what is the but for worked. If I develop an improved product that harms you and I might get market power, certainly no one in their right mind would want to attack that. But a literal look at some of the definitions of but for the action would you have this market power could cause you to be attacking all sorts of conduct that we really like. So my view is that right now, the gamut of behaviors that we are trying to understand under Section 2 are sufficiently idiosyncratic that it's much better to go the route of developing safe harbors for those categories that we understand.

Now having said that, I think there are some general principles that have actually been ignored by the courts and they haven't paid enough attention to the economic learning. Let me just talk about a specific case. I think Greg's question had too many things. It had two-sided markets, it had bundling, kind, refuses to deal. Let me just take one and maybe some of the other questions can deal with the other topics.

Take bundling, okay? Bundling was a topic that the Antitrust Modernization Commission talked about and they had a three-part test. The three part test is incremental revenue versus incremental cost was the first one. What did that mean? Suppose you have a monopolized product that you sell for $20 alone, there's a competitive product B for $10. So if someone bought them separately, it would be $30. And then the monopolist offers a bundle of $25 for the two products, so they take the $5, that's the difference between the $30 and the $25 and they subtract that from $10 and they ask is $5 above marginal cost. That's the first prong. The second prong, recoupment. The third prong, ultimate harm, okay?

So in *PeaceHealth*, when that decision came down, *PeaceHealth* basically adopts the first prong and says that the second prong is wrong, the recoupment prong, it's unnecessary because if you've harmed your rival, maybe you've driven up his costs and therefore you can have simultaneous recoupment because you can be charging a higher price. And the third prong of the AMC test is just too general, just stating apply rule of reason. Now I have to agree with *PeaceHealth*'s criticism of items two and three of the AMC test, even though I voted for the test, but you should read my separate statement.

Here's what I think is wrong about that, of that test. It certainly creates a safe harbor and I'm all for safe harbors—okay, especially in this area, because bundling is everywhere. You've got to be careful if you want to start attacking it. But predation may well be a very poor analogy to understand bundling. So let's go back to my example, the $20 for the monopolized product, $10 for the competitive product and then $25 for the bundle.

When you take the $5, the $30 minus $25 and apply that to the competitive product and ask is that below cost. When you do that your implicit assumption in this calculation is that the price you are charging for product A, the $20 is going to stay. It's given and you're just asking if I add the bundle at $25, is that a good or a bad thing. Well, that's clearly wrong. A firm is going to price differently, whether it has a bundle and the separate product A, or whether it's just offering a separate product A.

So think about it as follows. Suppose there are only a few people who are willing to pay $20 for product A and they don't want product B. So what you do if you are the monopolist of A, you offer A at $20 and you offer a bundle at say $25 and you are able to capture all of those people who really just want A and not B. That's price discrimination. So what I always worried about on the AMC test is there is this whole category of behavior in which bundling is used to price discriminate which need not have antitrust implications at all. It's a standard method of pricing and that's going to be missed.

So what's the fallacy? The fallacy in these tests is that you are keeping the single monopoly priced product the same. Another way of saying that is you are failing to understand that by offering a bundle together with A, the monopolized product sold separately, you are sorting the market into those who really value A and those who kind of value A not so high. That is a benefit to the firm, generates revenues to the firm. That revenue is nowhere in any of these incremental revenue tests. So that is why these—quote—safe harbors are okay in the AMC or in *Peace Health*, but don't go far enough.

So what is the standard, is this is where I say there is some economic learning? We know that these anticompetitive stories under Section 2 typically involve instances in which there are economies of scale that the rival whom you are trying to harm has to incur. And you are depriving him of scale, and by that method you are harming him and you are increasing your market power. That means that if you see a marketplace in which a plaintiff comes and he's still there because he has a whole bunch of customers who just want that product B—they don't care about A at all, so they don't buy the package A, B.

So there is a lot of scale in B and that should end the inquiry. If there aren't economies of scale or if he's large enough to achieve these economies of scale, this mechanism that's in the economic literature to harm competition can't work. That should end the inquiry. Another way of stating this quite precisely for when you have product A and B together, discount two product, separate products are the consumers who just buy product A harmed as a result of this action? If they are not, that should end the inquiry.

So along these prongs, the first prong of the AMC test or the *PeaceHealth* test are fine as far as they go, what I really worry about those tests, and I got this fear when I was reading *PeaceHealth*—maybe I was misreading it—is that if you flunk this test, the first prong which kind of looks like incremental revenue versus incremental cost but really isn't for the reason I said. But if you flunk it, I don't want that to be taken as some indication of liability that you have to defend against. You should be allowed to defend by saying, or that it shifts the burden, you should be allowed to say a safe harbor should be if I can explain this behavior in the absence of harming a rival who doesn't have economies of scale, if I can defend that, that should be enough.

So my own view of some of these Section 2 cases is that an overarching principle that's been ignored is the importance in the economic literature of scale effects on the rival to harm him. And if the rival can stick around for other reasons, then maybe there is not much to the Section 2 claim.

Greg Sidak: Doug?

Doug Melamed: Just very briefly. I agree with everything that Dennis said, but there is something that hasn't been mentioned and it is this. In bundling, as in almost any case that I can think of, under almost any test that is within the range of the test we consider, you have to look at the but for rule. These tests do not enable you to avoid that. The bundling analysis typically goes as follows. There is a bundled discount, that's a price cut, that's good. Why on earth would we condemn it, then we go through the economic analysis.

But you cannot say that there is a bundled discount by looking at the defendant's conduct in the course of his allegedly anti-competitive strategy when he prices one product at $20 and the other at $10 and gives the bundle away for $25. The question you have to ask is in a regime in which he couldn't do what he did, what would his stand alone prices have been? Was there really a discount? Maybe in a different regime, he would have sold the products for $15 and $5 or $15 and $10, and there wouldn't have been a discount at all.

And in order to determine whether there is a discount and in order to begin the analysis, it seems to me you have to ask what are the but for prices. Because if you take the actual prices, I mean the algebra of the AMC test is completely correct. I think it misses the real story.

Male Speaker: A couple of quick things?

Greg Sidak: Sure.

Male Speaker: First, it seems to me if you're going to do the AMC test, the attribution test, that the *PeaceHealth* court got it wrong and you've got to do recoupment. If, in fact, you're going to take all of the—with all of the problems of doing that, if you're going to take that discount and attribute it, it may often be below marginal cost. That shouldn't end the inquiry, that shouldn't be a problem.

The theory in most of these cases is you've got a product in a separate market, are you going to create sufficient market power in that other market to be able to recoup. And if you can't, then you've done nothing wrong, you've simply just provided discounts, which we like. So that is sort of step one. Step two is I think, I agree with lots of the complications that Dennis outlined and the special cases, but then you have to come back to how do you give people guidance and how do you work with different scenarios.

It is often about economies of scope, but unless we go back and get rid of *Brooke Group*, which I know we have at least one vote for in the room, you have a situation where it's perfectly appropriate to limit price, to deny economies of scale to your rivals as long as you're above cost. That's okay under *Brooke Group*. So why should that not be okay if you are dealing with two products?

Indeed, think of the situation in which you charge the high price for the monopoly product, you take that money, you apply it to reduce your price to just above your cost on your second product. If that deprives people of economies of scale, nobody would be able to get into court. Why should it make any difference if you do it through a bundle? So I just think we need to make the tests work together, as well as make the test easy to apply.

Greg Sidak: I think because of the press of time, we need to move on to George Cary's presentation on standards setting under Section 2. I'm sure we'll get back to some of these issues of both bundles and safe harbors in the remaining time.

George Cary: I will run this by as quickly as I can in order to get back to this exciting dialogue. I'm going to talk about standard setting abuse as a

Section 2 violation. The reason to talk about it is not only because it's interesting, but because there has been a lot of court activity over the past few months and there will be over the next few months with the *Broadcom v. Qualcomm* case in the Third Circuit, the *Rambus* case that is going to the D.C. Circuit.

So we are going to talk a little bit about the risks of standard setting and the benefits of standard setting on the one hand, the role of antitrust in policing standard setting context, run through the recent cases and then hit up some conclusions. So benefits of standard setting, why do firms engage in standard setting? Well, it's pretty straightforward. Where there are wide ranging network effects, where interoperability is critical, such as in telephone systems, such as in computer networks, the ability to set a standard that everybody can build to and that everybody can then compete in producing standard compliant products potentially creates tremendous efficiencies. Rather than fighting it out with multiple standards, retarding the rate of achievement of economies of scale.

You agree to the protocol up front and as a result, you're able to implement that standard more rapidly, get those economies of scales and efficiencies so to accelerate the adoption of new technologies which potentially improves consumer welfare. It can also promote competition at the product level if multiple companies are able to practice the standard as opposed to having only those companies that can develop their own standards, compete with proprietary standards. So it could be a procompetitive effort on that front as well.

What are we worried about in terms of standard setting? First, we are worried about collusive behavior among competitors, the ability of the Cabal, if you will, that gets together to set the standard to eliminate viable alternatives, to keep other companies from competing in the market by not making those standard technologies available to them. There have been a long line of cases going back to the Supreme Court case in *Allied Tube* which have highlighted the potential collusive aspects and anticompetitive aspects of joint standard setting among industry competitors.

The creation of the standard may also create monopoly power that results from the fact that a single standard has been selected. The elimination of competing alternatives prevents market-driven pricing and enhances the holdup power once that standard has been adopted. And then lock in prevents companies from moving to an alternative technology once that—front costs of that standard have adopted. So that's another aspect of the antitrust concern for standard setting.

Because these risks of standard setting, because industry members who get together to develop this standard don't want to face the prospect of somebody with a patent later on holding up themselves and the industry by extracting exorbitant royalties, standard setting organizations typically take steps to constrain the ability of firms to, after the standard is adopted, extract that market power. And those procedures that standard setting bodies have implemented basically fall into two categories.

One is the obligation to disclose patents so if you are not faced after the adoption of the standard and there's some investment with a holdup situation where somebody with a submarine patent comes along and says now that you've made this investment, pay me. The other is the so-called FRAND commitment—an agreement that once your technology is included in the standard, that you will not hold up the industry, you will instead make that technology available on fair, reasonable and non-discriminatory terms.

The concept of FRAND is a concept of applying the competitive environment before the standard is adopted. And in setting royalties commensurate with that competitive environment rather than waiting until after the lock in and allowing firms to then extract the monopoly power that is implicit in the fact that all other alternatives have been foreclosed by virtue of the adoption of the standard.

The idea of the non-discriminatory part, the ND part of the FRAND commitment, is that having adopted a unified standard, the idea is to allow multiple firms to compete in producing compliant parts. So if a firm that holds essential technology can discriminate against its competitors in its particular compliant market, it would be in a position then to monopolize that market and extract the holdup value of the standard through that monopoly, even though it's agreed not to extract that value through the royalty mechanism.

So again you need both a fair and reasonable, in other words, X and competitive royalties combined with ND, non-discriminatory licensing of the patent so as not to disadvantage competitors in the standard compliant industry. What is the role of antitrust? The role of antitrust is to ensure that the outcome is, in fact, competitive and to ensure that when firms have gotten their technology adopted into the standard, they don't then extract monopoly power, monopoly rents as a result of that inclusion.

Without substantial efficiencies and constraints on participants who have engaged in the standard setting activity, the risk is that the result will be a private monopoly. So the role of antitrust is to ensure that willful avoidance of the pro-competitive constraints embodied in those IPR rules can violate Section 2 because they constitute a willful acquisition of monopoly power. The holdover patent included in a standard setting party gains monopoly power. Monopoly power is defined as the power to exclude the standard.

By not licensing your essential technology, you can preclude anybody from practicing the technology. Monopoly powers also defined as the power to control price. If you could set your royalty in the ex post world to take advantage of the monopoly created by the standard, you have the power to control price. Agreeing to FRAND terms to gain inclusion and then avoid-ing the constraint that that FRAND agreement imposes is willful acquisition of monopoly power.

It is not competition on the merits because but for the commitment, your technology never would have been selected in the standard, so it must be willful acquisition of monopoly power. Deceptive hiding of patents to gain inclusion is likewise willful acquisition of monopoly power. You are constraining the standard setting body from making an informed choice based on the intellectual property rights that you have. That is the basic premise of the cases that deal with standard setting in the antitrust context.

Some have argued, and I think we're going to hear some of this in a few minutes, actually, that the SSO's FRAND's commitment and disclosure commitment should be enforceable only under contract or tort law rather than under antitrust law. The argument is that if you breach the commitment, that is a breach of contract and there is no role for antitrust. On the other hand, where there is anti-competitive effect, there should be a role for antitrust. The public can be injured by virtue of the elimination of standard competition, the agreement that there will only be one standard.

And if you now, you take advantage of that and eliminate the constraints that were imposed to make sure that that result would be competitive, the public will be injured. And ordinarily when the public is injured as a result of anti-competitive activity is the monopoly pricing, the public has a remedy, and that's the role of antitrust. It's been analogized, for example, to the fact that if you blow up your competitor's factory, you may be guilty of arson, but you also may have committed an antitrust violation if the result is monopoly power with barriers to entry and the ability to exercise that power.

Some have criticized the ability of courts, antitrust courts or antitrust agencies in defining what is a fair and reasonable royalty. But again, this criticism would also apply if you're bringing a tort or a contract claim so that in and of itself should not be a reason that antitrust law does not apply.

So now let's look very quickly at the recent cases. *Rambus* is a case that deals with failure to disclose. The FTC wrote a lengthy opinion and I commend it to you. Again, the idea is you don't disclose, you participate in the standard setting process after the standard is adopted, you announce the existence of patents and you then try to use those patents to extract rents from industry participants. The FTC holding, exclusionary conduct such as deception may distort the selection of technologies and abate protections designed by SSOs to constrain the exercise of monopoly power with substantial and lasting harm to competition.

More recent case, Third Circuit, is the *Broadcom v. Qualcomm* case where we represented the plaintiff. In this context, this was again a FRAND case. It has non-disclosure elements, but it's mostly a FRAND case. The idea here again is that if the purpose for disclosure is to require the holder of essential technology to commit to constraining their exercise of their market power. So failure to disclose and then exercise of that market power has the same effect as disclosing and then ignoring the FRAND commitment.

The allegations are that that's exactly what Qualcomm did, it agreed to license on FRAND terms, it then did not follow through on that commitment by charging the royalties that are available only because of the monopoly that's been created in the standard. And also by discriminating against competitors, they make standard compliant chips. The allegation is they put a tax on their competitors in standard compliant chips so as to disable them from competing, raising their costs, thereby allowing Qualcomm to extract monopoly at the chip set level, as well as through the high royalties.

The Third Circuit has concluded that making a deceptive FRAND commitment does in fact violate Section 2 of the Sherman Act, using control of essential patents to discriminate against a potential competitors' product. You also may state a claim for attempted monopolization under Section 2 of the Sherman Act. It set forth a four part test. I will let you read it in the printed version. In any event, it sent the case back to the district court and the court, the case is now proceeding with discovery.

One other point to make is that a similar holding came out of the Southern District of California in a patent context, where the district court held that Qualcomm had abused the standard setting process, in that case by failing to disclose and then suing for an injunction on the patents that were incorporated in the standard. The district court in that case found, as did the jury, that this was part of a concerted effort to abuse the standard setting process and concluded that the remedy for such an effort is the unenforceability of the patents against standard compliant products.

So coming up in the patent context under the guise of inequitable conduct, the court concluded that these patents could not be enforced on the same reasoning as in the *Rambus* case. Intentionally failing to disclose relevant patents during the participation in standard setting may render the patents unenforceable. And I think on that, I'll leave it so we can get back to the dialogue.

Greg Sidak: I think that these standard setting controversies are hugely important in terms of future court decisions that are going to come out. And I wanted to try to distinguish between several different fact patterns that are suggested by George's presentation. One is where the defendant is being sued essentially on a theory of fraud that constitutes also an antitrust violation.

Another would be the European pure antitrust approach, which would be to say in the absence of fraud, assuming the manipulation of the standard setting process, the owner of the essential input nonetheless is abusing a dominant position by charging too high a royalty in violation of Article 82. And that's the Qualcomm case in Europe now as I understand it. Another way of trying to address the problem of patent holdup, which is a problem that arises because of the availability of the injunction, would be to revise patent law directly. So that would be a non-antitrust mechanism.

But there's a fourth category that is also taking place, and that is amending standard setting organization procedures for considering the maximum royalty that would be charged by a firm that has technology that is being considered for adoption into the standard. So there are two business review letters that the Justice Department has issued in this area in the last year. One is for an SSO called vTone and the other is for the IEEE.

And in those business review letters, the Justice Department has said that this kind of information exchange that would take place among potential licensees of the essential technology once it's adopted into the standard, this ex ante discussion of the cost of that technology would be subject to scrutiny under the rule of reason rather than the rule of per se legality.

So let me toss out this question—is that good law? Is ex ante exchange of information among competing buyers of a product when they are deciding whether or not to incorporate or not incorporate that particular product or technology into the standard, is that horizontal collusion that is a per se violation of Section 1? Did the antitrust division make a mistake with those business review letters? Any thoughts? Ken, I won't ask you to answer that question.

Male Speaker: I was going to address the European question.

Greg Sidak: Sure.

Male Speaker: You know, I think that that point is relatively straightforward from an antitrust policy point of view. Let's assume there is no deception in front. Let's assume a scenario where in good faith, somebody agrees to a FRAND commitment. A few years later, after the standard has been adopted, after there is lock in, a patent troll comes along and buys up the patents and then goes out and says by the way, the royalty is now ten instead of two. It seems to me that that is patent holdup. That that is an anticompetitive use of market power developed through a collaborative standard setting activity and that that ought to be reachable under the antitrust laws.

Greg Sidak: Yes, but I'm not very sympathetic to that fact because the licensees could have bought up the patent instead of the troll.

Male Speaker: They could have, but they didn't.

Greg Sidak: Well, that's their problem, in my opinion.

Male Speaker: That's their problem if you use a product that—it depends upon the standard as well.

Greg Sidak: Doug?

Doug Melamed: Well, I've got to ask George. I think it's a matter of law, this is wrong George, and it's a complicated argument and I've gone into some detail recently. But let me give you the case that I think ought to put a rest to that, it's *Discon v. NYNEX*. In that case, there was fraud on the regulator the purpose of which was to enable the regulated monopoly to increase its prices.

And the Supreme Court in effect said that's not injury to competition for purposes of the antitrust laws because nobody was excluded. All that enabled them to do was to exercise their lawfully obtained market power. And so I think on your fact pattern, I think what you would say is that there is a breach of contract here and maybe you write the instrument in a way that the seller is liable because he can't avoid liability by selling the patent to a troll unencumbered.

But I think if there is no fraud at the outset, it's hard to say that there is any creation of market power by reason of the conduct which is wrongful. If I can go back to Greg, to your question about the DOJ business review letters. They are absolutely correct. And they are correct not only because you ought to have, there ought to be transparency and prices ought to be posted so that decisions can be made, but because they are a much better solution to the problem that is, the much talked about solution of requirements of disclosing patent interests. Particularly where the disclosure of patent interests has to do with pending applications or intentions to file applications in the future, because those are trade secrets and disclosure in which it could be very harmful to the holder and hence to competition.

The reason disclosure doesn't work is from what I've observed in the world, and I've been around a number of these cases, we're involved in *Broadcom* and *Rambus*, the myth of the ex ante calibrated assessment by the standard setting body of which patent is going to be better given the price and so on, it's a complete myth. Because you don't have enough information about the technologies and the patents and so on to make that assessment.

And so disclosure as a practical matter, to my knowledge, serves only the purpose of triggering a FRAND commitment, so why not cut out the middleman? Why not cut out the mythic assessment of the technology and the disclosure of trade secrets and simply say that standard setting bodies ought to have rules and some of them do and the business review letters have permitted. Saying if you want to be a member of the standard setting organization, you have to commit to that.

If you wind up having patents that are [indiscernible] standard, you must license it on FRAND terms or you must publish your rates in advance or whatever the pricing algorithm is. That's a much better way to go after the holdup problem than disclosure.

Greg Sidak: Well, Doug, I guess I'm puzzled, because if ex ante exchange of views among potential licensees as to the cost of a particular technology that might be adopted into the standard is something that isn't really that valuable, then why are the standard setting organizations proposing to change their rules in this way in seeking business review letters to avoid antitrust liability?

Doug Melamed: No, no, no. The business review letters, as I understand it, have to do with requirements of disclosing your price terms. Haven't sought business review letters for requirements to disclose patents.

They've been around at some standard setting bodies, but not JEDEC [phonetic], for a long while with I think at best mixed success. So I applaud the idea of disclosing price terms. My point is disclosing the patents doesn't lead anywhere.

Greg Sidak: Okay. Dennis?

Dennis Carlton: Even though I started out with a disclaimer, I'm sure I speak from the Justice Department when I said it wasn't, the two letters are not a mistake. What I would say is that this also came up at the AMC as one of the topics, at the organization commission, as one of the topics to study, standard setting and whether we needed to study it. And we actually chose not to study it because we felt that under a rule of reason, pro-competitive joint ventures would survive.

Now that didn't give a lot of the people in the industry much comfort, but I think these letters have given them comfort. And it does seem to me the right answer. You don't get a carte blanche, but if you are doing something in a context of a joint venture, which you can think of a standard setting organization is, then if collective action is required to choose a standard, obviously for efficiency you have to have some notion as to what the cost of choosing the different standards are in order for you to choose an efficient standard.

There might be uncertainty, I agree with what Doug says, in predicting exactly what are the best patents, how much they are really going to cost, perhaps. But getting information about that seems to me, in many cases, completely unobjectionable and we judge under rule of reason. That doesn't mean it could be a subterfuge for people in a standard setting organization to gang up on one particular supplier. I think that could cause a trigger of an antitrust violation. So I think they got it exactly right by saying they would judge it under a rule of reason.

Greg Sidak: We're running out of time. I did promise to take some questions from the audience. So let's take about five to ten minutes of questions. Aaron—please wait for the mike.

Aaron Edlin: And so I wanted to comment on something that Dennis and Doug both were getting at. Doug put forward the idea that we should look to sacrifice in terms of incremental cost and incremental benefits. In bundling, in a wide variety of cases and perhaps all Section 2 cases, Dennis said gee, bundling may not be a good analogy for—predation may not be a good analogy for bundling and you should look at the prices in the but for world, which will differ from the prices in the actual world on the single products.

Doug said, amend, in fact, you could imagine that the firm would, who had been selling the single goods at $20 and $10 and the bundled goods at $25 would in fact have been selling at $15 and $10 individually. Let's take it as $17 and $7 to make it slightly more realistic, but you get the same sum Doug was going for, which is $25. And therefore now they may not be selling either goods if you use those prices below cost and so they get by on Doug's test.

But now let's go to Dennis's test of we should look for total welfare. Now it's pretty clear that if in the but for world the prices would have been $18 and $7, we're a lot better off with the unbundling because you can buy the bundle at the same price or you can buy either good at lower prices. So whereas Doug's test would let you off in the bundled world, in fact if you go with Dennis's total welfare, you don't want to.

Greg Sidak: Dennis—I'm sorry, go ahead.

Aaron Edlin: I'm now—

Greg Sidak: A question and not a comment.

Aaron Edlin: So the question is, is the problem here that the test wasn't right in the one good model or is the problem here, as Dennis said, that predation is not a good analogy for bundling?

Doug Melamed: Let me say that there is a different problem. The problem is I wasn't clear in what I was saying, because what I meant to say is you can't look at the bundling and so—oh, it's a discount and then let it pass the AMC test, end of the case, using the prices of $20 and $10. That if the but for prices would have been $18 and $7, I think the defendant might lose on the ground that there was no reason for him to contrive the prices the way he did to go to $20 and $10 and then this nominal discount but for the exclusion of rivals. And my point was that even if you pass the AMC test using the actual marketplace prices, if you can determine what the but for prices are, the defendant might lose.

Male Speaker: If I could just say that your supposition that I would trigger an antitrust violation is wrong. There's a very important point here, and it's to distinguish price discrimination from an antitrust one. If you engage in price discrimination, welfare may go up or down, total welfare, consumer welfare may go down, total welfare can go up or down, it's ambiguous. Price discrimination is not an antitrust violation.

It's an antitrust violation only if you have harmed a rival with the consequence that someone else's prices, some price to some consumer goes up as a result. In the example you gave, it's quite possible, as you explained, that without bundling, consumer welfare perhaps could be higher. And that's because price discrimination may harm consumers. But price discrimination has nothing to do or should have nothing to do, in my view, with the antitrust laws.

If you are a monopolist, for example, you should be able to price discriminate, it's not a violation of the antitrust laws. You could say—ah, I'm not going to let you bundle, I'm not going to allow you to charge consumers two different prices, for example. And that might improve welfare for some consumers. That's not an antitrust violation. And that is a very important point.

I think the courts get confused on that all of the time. There are articles in the economics literature about doing before and after pricing saying well, did consumer welfare go up or down. Those are the wrong tests if they don't, for an antitrust violation, unless they involve impairing the competitive environment so that after you've engaged in whatever act it is, bundling, you then can exploit market power that you didn't have before. Absent that, it's not an antitrust violation. I think that would get rid of a lot of antitrust cases that are alleged to be antitrust violations.

Aaron Edlin: You have to add reducing competition.

Male Speaker: I just want to say one other thing, because Aaron's excellent presentation was provocative, and I think that's what you want presentations to be. But I did want to point out, there is no question in the economic literature that the Chicago School, the so-called Chicago School one monopoly profit test is beyond doubt, it's correct. It's been proven rigorously—

Male Speaker: Under certain conditions.

Male Speaker: Under certain conditions, there is no question about it. So that is not the issue. It is the issue on post-Chicago, which you did talk about. And I think this is an important point we should make since we are talking about Section 2. The administration of Section 2 depends upon trading off various types of errors. Do you want to really go after someone for an antitrust violation, or are you fearful of making errors? So that's how we read it.

The *Turner* test is trying to balance those two and that's what we're doing in Section 2. What is called post-Chicago, which really isn't, but if you call it that, the finding that there can be harm from certain vertical cases. What's very important to understand about the economic literature is how fragile those results are. They depend on very hard to prove and very particular assumptions and the results in those cases flip if you make different assumptions.

That is telling us when we apply Section 2, if we want to trade off type one versus type two errors, these—quote—new theories, some of which I will say I also have published, should—if you are going to rely on them, you better be very careful you understand that you may be making a lot of errors and is that what you really want to do.

Without empirical support, which there is not for some of these theories, you are going down a very risky path to become more interventionist than antitrust on Section 2 cases based only on the economic literature.

Greg Sidak: There was a question here?

Male Speaker: Yes, thanks. I think when we started off, I heard an equation between consumer welfare and total welfare. I thought I heard the comment made that that's because there is an assumption that efficiencies are eventually passed on to consumers. I just wondered if there is any empirical support for that assumption?

Male Speaker: If you look at the standard of living since 1900 and compare it to just today, there's no question that the sole reason—not solely, but the major reason we are better off today than we were 100 years ago is because of technological change, productivity improvements. There's no question over the long run, that's responsible for our improved standard of living. I think a trickier question is how quickly it would get passed on.

But even if it's—the point I was trying to make is that in most cases and in, for example, mergers that generate an efficiency, we know that some part of the savings will be passed on. That's undeniable. It would be a rare case in which none of the savings are passed on. I think it's a rare case in which there's a difference in outcome depending upon whether you take total welfare or consumer welfare as your standard. There can be differences. I think they are relatively minor and certainly over the long run, they are very, I think the number of cases that would come to very different decisions would be very few.

Greg Sidak: Unfortunately, we are out of time. So I'd like to thank our panelists for a very informative discussion this morning. Thank you.