FTC-DOJ Conditional Pricing Practices Workshop
June 23, 2014
Segment 1
Welcome and Introduction.
Overview of the Economics of Conditional Pricing Practices
Transcript

ANDREW I. GAVIL: To open today's workshop, it's my very great pleasure to introduce and welcome Assistant Attorney General Bill Baer of the Justice Department's Antitrust Division, who will offer some welcome remarks, to be followed by FTC Commissioner Maureen Ohlhausen. Please join me in welcoming Bill Baer.

[APPLAUSE]

WILLIAM J. BAER: I'm going to take Andy's introduction as that my remarks are welcome rather than welcoming remarks.

I want to welcome you all to this joint workshop, both those of you here in the room and those of you on the webcast. This joint department of Justice FTC Conditional Pricing Practices Workshop is-- it's a great celebratory event to be able to have this at the new FTC Conference Center. And it's great to share the podium not just with Andy in our next panel, but with Commissioner Ohlhausen.

As many of you know, the FTC and the Department of Justice Antitrust Division have held a series of workshops over the years on significant antitrust policy and enforcement issues.

The goal is to illuminate challenging antitrust problems and studying having these kinds of hearings are integral to our effort to make smart enforcement decisions. Perhaps most importantly, they fulfill that joint commitment the two agencies have to work with the public in identifying issues of significant importance in antitrust policy.

We work hard at both agencies to analyze and understand difficult questions so each of us can make the right enforcement decisions. When these sorts of recurring problems with broad implications for the economy arise, we think it very helpful, very productive to bring the best and the brightest together to discuss the issues. That's why in the last couple of years we've held workshops on most favored nation clauses and patent assertion entity activities. And that's why we're holding today's Conditional Pricing Practices Workshop.

These practices, including loyalty and bundle pricing, are common throughout the economy. They arise in many forms and across many industries. And there's debate, considerable debate, among lawyers, among economists, and others about the competitive effects and what the right legal analysis is in evaluating them.

Courts that have analyzed loyalty and bundle pricing have generated different and sometimes conflicting tests for finding liability. We are aware and I think need to continue to be aware that conditional pricing practices, in many cases, save consumers money. And many of us benefit from some kind of loyalty or bundle pricing in the retail setting.

You may have gotten a cup of coffee this morning and used your smartphone app or your frequent buyer card in your pocket to get a free latte. Others take advantage of bundle pricing at fast food restaurants where you can get-- you can super-size it, get your fries, your burger, your 74 ounce Coke. And those tend to be cheaper than buying them separately. And these are not, as a general matter, the kinds of conditional pricing practices we worry about.

We do have concerns, however, when a monopolist, when a dominant firm uses loyalty or bundle pricing in a way that restricts competition and maintains or enhances a position of market power within a supply chain.

The Division's most recent enforcement action in this area was 2011 involving United Regional Health Care system of Wichita Falls, Texas. United Regional enjoyed significant power, market power. It had entered into contracts with insurers that required them to pay significantly higher prices if they contracted with a competing hospital. Because the insurers needed United Regional's business-- it was the dominant firm in the area to compete in Wichita Falls. And the penalty for contracting with rivals was so severe almost every insurer in the area entered into exclusive dealing arrangements with United Regional. That, in turn, reinforced the dominant position of United Regional, and it kept prices higher.

Our enforcement action ultimately resulted, done jointly with the Texas AG's office, in a consent decree which prevented United Regional from engaging in these practices going forward.

Now, as I said at the beginning, it's not always easy to draw the line between the pricing practices that injure competition and those that do not. And we want to be careful in drawing that line because we don't want to discourage the kinds of legitimate discounts that benefit consumers. And we want to make sure, related point, that what we do protects competition and consumers, not necessarily competitors. These are tough issues.

And the reason we're having this workshop today is to advance these ideas, to help come up with a view that provides businesses with needed clarity so they can confidently offer discounts that save consumers money without running afoul of the FTC or the Department of Justice.

And we are honored today to have with us absolutely the best of the brightest economists, academicians, and lawyers who have thought deeply about these issues, have written about these issues. And we'll share their views and have some informed interaction on the panels today.

We're going to hear economic experts talk about their theoretical and empirical views of loyalty and bundle prices. Later in the afternoon, the lawyers will eventually get into the game and talk about the development of the case law and the legal standards in the area.

They will address key use cases-- PeaceHealth, LePage's, and the more recent Meritor and Sanofi decision. As many of you are aware, just within the last week or so, in the European Union the General Court affirmed the Intel decision. And that reaffirms, I think, the fact that this issue is not unique to the United States. And we will have some experienced international practitioners to share their view on bundled conditional pricing issues, how they are playing out in competition outside the United States.

I think this is a great program, a great group of panelists. I want to thank them all for being with us today. And I want to thank the FTC and DOJ staff members who work so hard to make this event possible. Thank you all for coming and watching. And with that, I'll pass the microphone to Commissioner Ohlhausen.

[APPLAUSE]

MAUREEN K. OHLHAUSEN: Well, thank you, Bill, for those insightful remarks. And good morning, everyone. And on behalf of the FTC, welcome to the Joint FTC-DOJ Workshop on Conditional Pricing Practices.

I also want to thank the staff at each agency who organized this program. I used to do this kind of thing when I was head of OPP, and I know how much work is involved to getting us to this point, so I'm very, very grateful.

I also want to thank the many speakers who have assembled here today for contributing their time and expertise. You are working on a very important issue with implications for common industry practices of loyalty discounting and bundling. And as Bill pointed out, treatment of conditional pricing practices under the antitrust laws is a complex and multifaceted issue that has challenged everyone in our bar for decades, and has engendered a variety opinions and even a circuit split.

I'm going to spend a few minutes first previewing today's ambitious agenda, and then I'll offer a few-- some guiding principles that, in my view, merit serious consideration in exploring these issues.

So starting with the day ahead. Professors Michael Waldman and Michael Whinston will start today with an overview of conditional pricing practices. They will lay the foundation for the rest of the day by defining these practices and helping us to understand how to locate them in the broader array of distribution strategies that can raise competitive concerns. They'll discuss how those practices can vary, the reasons firms might adopt these practices, and relevant economic theories, empirical research, and legal tests that might be used to evaluate their competitive effects.

After that at 9:30 and again at 11:00, we will hear presentations and discussion of the economics of conditional pricing practices. Our panelists will explore the various theories of competitive harm and benefit, including the circumstances under which competitive harm is more likely to occur.

They will also discuss the European approach to conditional pricing practices and the EC's recent Intel decision, examine the existing empirical evidence of the uses and effects of conditional pricing practices, and share their views on how best to analyze conditional pricing cases.

After lunch, Matthew Bennett, Ben Klein, Francine Lafontaine, Julie Holland Mortimer and Michael Waldman will engage in a roundtable discussion of the relevant economics. And that will be moderated by Dan O'Brien and Patrick Greenlee. The roundtable will aim to summarize and synthesize this morning's presentations as well as identify points of consensus and disagreement in this area.

Following the economics roundtable, Steve Salop will discuss two exclusionary conduct paradigms, predatory pricing and raising rivals costs, and apply each paradigm to conditional pricing practices to illustrate which paradigm is better able to identify competitive harm. His presentation will help transition the discussion from economics to legal policy questions that have challenged the courts.

Our afternoon panelists will then explore the current legal standards in the United States and Europe, and discuss the advantages and disadvantages of price-costs and other tests for evaluating conditional pricing practices.

To close o the workshop, Debbie Feinstein and Renata Hesse will moderate a discussion among Jonathan Baker, Dan Crane, Scott Hemphill, Fiona Scott Morton, Richard Steuer, and Michael Whinston that will reflect on the full day of presentations to see what lessons have been learned and what future steps might be needed.

Now I'd like to spend a few minutes offering some guiding principles that I try to keep in mind as I weigh these types of complex issues. Many of you have heard me speak on these points before, but I think they bear repeating. In shaping competition rules, we should aspire to promote predictability, fairness, and transparency in the law. The best way to accomplish these aims is to develop rules that are empirically grounded in economic efficiency while at the same time administrable by agencies and the courts.

The failure to incorporate economic analysis can allow for decision-making based on non-m competition policy grounds. On the other hand, failure to acknowledge the need for administrable rules can shut out entire classes of injured parties, undermining the credibility of the law.

Now, Bill already mentioned some of the leading cases in the current circuit split, Meritor, PeaceHealth, and LePage's. And noted the difficulty in drawing a line between pro-competitive and anti-competitive behavior. And this is a tough problem and not one that I can fully address in these few minutes. But trying to hue to the notions of predictability and fairness and transparency can help the thought process and ultimately may lead us to find the right balance between accuracy and administrability. And perhaps you can all figure out a way to obtain both.

For example, the Ninth Circuit adopted the Discount Attribution Cost Test in PeaceHealth in part to promote predictability and administrability. The court recognized the endemic nature of bundle discounts in the economy, acknowledged the Supreme Court's historical focus on protecting and competition, not competitors, and decided that the safer approach for consumers in the competitive economy was to adopt a price-cost test.

But questions linger about whether the difficulties associated with calculating the appropriate measure of cost render this test unworkable, cutting against predictability, transparency, and fairness.

Professor Hovenkamp recently wrote an article critiquing the Areeda-Turner test for predatory pricing in which he argues that it may not have done as much to promote administrability as people had hoped. And this suggests to me that the price-cost tests may not necessarily be the panaceas of administrability we thought they were. And I look forward to today's discussions about it from this perspective.

Now, on the other end of the spectrum, as the Antitrust Modernization Committee noted--Commission noted, "The Third Circuit's decision in LePage's does not require rigorous consideration of economic efficiencies before a finding of liability is made." Instead, the AMC noted that it could be read simply to allow a jury to consider whether the plaintiff was excluded from a market as opposed to whether the plaintiff could offer similar levels of efficiency as the defendants. The AMC concluded that LePage's offers no clear standards by which firms can assess whether their bundled rebates are likely to pass antitrust muster.

So just to conclude, the FTC and the DOJ value your insights and input on these issues. The public comment period will remain open until August 22, and we are actively seeking your thoughts and observations.

Right now, I look forward to hearing the panelists offer a better sense of how to chart a course forward that allows us to give business the latitude they need to engage in pro-competitive pricing practices while still prohibiting and discouraging harmful anti-competitive behavior.

Importantly, you can help us determine how to make the agencies constructive partners in designing and administering workable rules for industry. And I hope you keep in mind my guiding principles offered today as you think through each proposal or critique. Does this proposal offer market participants predictable guidance for the lawfulness of their behavior? Is it fair to both consumers and industry? Will this proposal increase or decrease enforcement transparency? These questions may help us along the path of finding solutions that promote economic efficiency and consumer welfare.

And finally, underlying everything is the bedrock issue of whether the proposal will make efficient use of government resources or if it would be better to allow the market to find the answer. Although a universally-appealing framework seems to have eluded the court so far, I'm sure with the right motivation you will figure it out by close of business today.

So Andy, lock the doors. Bathroom breaks will only be awarded to those with the best ideas. Thank you.

[APPLAUSE]

ANDREW I. GAVIL: You need to advance the slides to the beginning of their presentation, please.

MICHAEL WALDMAN: OK, thanks very much. I'm Mike Waldman, and this is Mike Whinston. I guess the name cards in front of us. And so we're doing a joint talk. And so we're going to be switching back and forth. Since we're in kind of a multi-round game, I'm going to try to establish a reputation for not taking advantage of Mike, so I'll try to keep the introductory comments relatively short.

OK, so what's the outline? The outline is, what are loyalty contracts? And that's what I'm going to start talking about in just a second. Then, Mike's going to talk about single product loyalty contracts focused mostly on theory. I'll then talk about multi-product loyalty contracts, again, focusing mostly on theory. And then Mike's going to end by talking about legal tests.

And part of the logic of this outline is I think both of us feel that these contracts are different. They're sort of two categories here that should be understood. And whether you have a single product loyalty contract or a multi-product loyalty contract in terms of what's going on the market, what are the potential theories are quite different. And so it's useful to kind of divide the cases in that way.

All right, so what are loyalty contracts? In a standard pricing case, the price that gets charged by firm I on product J just depends on the quantity that firm I sells in terms of product J.

In a loyalty contract, particularly where we're referring to referencing rivals, then the price for firm I and product J depends not just on the quantity that firm I sells in terms of product J, but also depends on other products sold by other firms.

Now, the most general case is it depends on the products sold by some other firm than I in terms of the same product that some other firm is selling. But also potentially, in terms of other products that that firm is selling. And the particular cases are given below.

So in a single product share-based discount, which is one particular way that the referencing rivals can occur, what happens is that the price depends on the share that the customer buys from firm I of product J. But you could also have multiple product share-based discounts where the price that the customer buys from firm I in terms of project J doesn't depend just on the share in terms of product J, but depends on the share of other products that firm I might be selling. And so that's the key distinction.

And another special case is exclusive contracts, which is kind of an extreme case of the single product share-based discount, which basically says, I'm only going to sell to you if you buy everything, if you buy everything from me.

The focus is, how does this affect market outcomes? How does this affect welfare? We'll be talking quite a bit about the theories.

Now, one thing what that we're not going to be talking about is-- we decided we only had 40 minutes. So you could think about all units discounts, or kind of nonlinear pricing in general, we're going to keep our comments just to referencing rivals, the idea that pricing depends on how much the rivals sell it.

Now, in some cases, you could mimic that if there's not very much market uncertainty in terms of demand. You could mimic that without actually referencing rivals, so you want to be a little careful. But we're going to be speaking in terms of contracts that reference rivals, at least implicitly.

OK, now why has this become an important issue? There's already some discussion of this.

Well, it's because there are basically a number of cases that have been decided in the last few years where kind of a different kind of standard has been set. And the cases have been decided in somewhat of an inconsistent fashion, which makes it difficult for buyers to think about what's legal, what's illegal. So I'm going to go through very briefly four cases, just to give you a clear sense of, what's the issue? And that the courts are actually not deciding this in a very consistent fashion.

So where this started was the LePage versus 3M case, where 3M had high market share in branded tape products. It as kind of early on, branded tape products was most of the market. But as the market progressed over time, private label tape products became more important. And 3M decided to enter that market.

LePage was the main producer in the private label tape market. So what did 3M do?

Well, they targeted-- not surprisingly, they targeted buyers who were buying private label tape, which were a lot of LePage's customers. And what they did is they offered discounts across six product categories based on various category charges across these six product categories. And some of these product categories were categories where LePage wasn't offering a product, so it was difficult for LePage to respond with prices across all these products to match what 3M was offering.

And LePage alleged that 3M's conduct was exclusionary. And the courts ruled in favor of LePage, even though there was no finding that 3M's pricing was below cost. So that was kind of the new change, which was usually it had been-- there had been some kind of price-cost test. And that didn't occur in this case.

Then, along comes Cascade Health Solutions versus PeaceHealth. They're two providers of hospital care in Lane County in Oregon. And McKenzie provided primary and secondary care in its single hospital while PeaceHealth offered all three-- primary, secondary, and tertiary care-- across its hospitals. And then PeaceHealth did something similar to what LePage did, which is offered significant-- well, it was a little bit more specific, but offered significant discounts on tertiary care to insurance companies that purchased all the hospital-- in terms of purchasing all hospital services, including primary and secondary solely from PeaceHealth. And McKenzie made a claim similar to LePage that PeaceHealth's conduct was exclusionary.

And the courts in that case ruled quite differently than in the LePage case. And they applied a price-cost test.

Now, both of those cases were multiple product brand loyalty discounts. The next two cases are single product. Or at least they were looked at as single product. So ZF Meritor versus Eaton. Eaton was the leader in heavy-duty truck transmissions and ZF Meritor was a rival seller that had recently introduced a product innovation. In that market there were only four buyers, the manufacturers of heavy-duty trucks. And Eaton started offering long-term contracts with a number of different features-- rebates that depended on high minimum percentage purchases from Eaton, preferences, required preferences for Eaton products in data book listings, and a clause that required Eaton to price-- for its products to be priced lower. And ZF Meritor alleged that it was a de facto exclusive dealing contract.

And the courts agreed in terms of ZF Meritor's allegation, although they said that ZF Meritor lacked standing because it had exited the market.

And then the final case is Eisai versus Sanofi Aventis. Again, a single product case. Sanofi Aventis was selling Lovenox, which is an anticoagulant drug with a high market share. Eisai had exclusive distribution rights for a competing drug produced by Pfizer, Fragmin. And again, it as the same idea, Sanofi Aventis offered a discount if customers purchased at least 90% of its anticoagulant purchases from Sanofi Aventis. And then the discount fell quite quickly if the market share fell. Eisai made the same kind of argument as in the previous case that this was exclusive dealing.

And in this case, the courts dismissed the case, arguing that it didn't pass a price-cost test. So you can see where the issue is coming from. The courts are in kind of similar cases, sometimes saying a price-cost test applies, sometimes saying that it doesn't.

MICHAEL WHINSTON: Well, we're behind already.

MICHAEL WALDMAN: Oh, sorry.

MICHAEL WHINSTON: No, I'm just kidding. No, you did a great job. Thanks.

So I guess first of all, I just want to say, in looking at my other panelists slides, I noticed that everybody has a disclaimer. So I should say this doesn't reflect my or our views in the past, the future, or even the present.

I should also say we were asked to set the table. So I think we're going to save our personal views for when we're speaking later. All right. So we're going to first talk about single product loyalty contracts, where the contract is governing the sale of just the single product. Avoiding issues of bundling and the like.

So I think the bottom line is that these contracts are motivated and can come up for many different reasons. They can encourage efficient investments. They can aid in price discrimination. They can extract rents our of future entrants. They can intensify or diminish the intensity of contracting competition, facilitate a reduction in downstream competition, reduce downstream competition by foreclosing access to inputs raising rivals cost, and reduce competition by foreclosing access to buyers. So what I'm going to try to do in the brief amount of time I have-- these are the various reasons that have come up in the literature. And just sort of go through them and hit the main points about what each of these stories is. So we'll start with the good.

So one thing that these loyalty contracts and exclusives can do is encouraging efficient investment. So probably the most well-known story about efficiency is that subjecting a buyer to exclusivity can protect seller investments for free riding.

So if a seller, for example, is advertising and bringing customers into a retailer's store, if that retailer can then switch the customer to a lower-cost product, thereby free riding on the seller's advertising investments for example, the seller's incentives to make those investments is going to be reduced. And sometimes, those investments are important. So an exclusive contract can help achieve efficiency.

Another story for investment-- so that first story is [INAUDIBLE] and there's follow-on literature as well. A somewhat different story is that subjecting a buyer to an exclusive contract can affect the investments of the buyer. And in particular, can help get the buyer to focus his investments on the seller. So a buyer may have an incentive to invest more broadly, to maintain its bargaining position and options relative to the seller. Sometimes, that's inefficient. An exclusive or a loyalty contract can help with that.

Another story that comes up for exclusives is that they an aid in price discrimination. So there's a couple of recent papers, one by Majumdar and Shaffer. Another by Calzolari and Denicolo, that talks about exclusives and loyalty terms arising as screening devices.

So the basic idea is that high-demand buyers may find restrictions on using and selling other products more costly than low-demand buyers do. So when you design your pricing scheme, the package that you're intending low-demand buyers to use, you can put an exclusive or a loyalty term on that and make it unattractive to high-demand buyers.

Now, that is often going to end up being bad for buyers. That is, if you aid the ability of a seller to price discriminate that can be bad for buyers. On the other hand, it may increase efficiency.

For example, it may reduce the tendency of the seller to reduce quantity in the low-demand package, which is often a way that sellers will try to get high-demand buyers not to find choosing the low demand-- what's intended for low-demand buyers to end up finding that attractive.

So that last story was about extracting rents out of consumers. A different story is to extract rents out of future entrants. So [INAUDIBLE] original model thought about an incumbent and a buyer as signing a stipulated damage contract, which you can rename in the context of today's session as a disloyalty tax. And you did that to induce a later entrant to price more aggressively, to lower his price.

The idea is that you were basically doing this as a pre-commitment to extract rents out of the future entrant. Now, for a buyer that may actually be good for the buyer because the buyer may share in some of those extracted rents, depending on what the bargaining is with that initial incumbent.

On the other hand, it causes an inefficient reduction in the use of a rival's good, of the later entrant's good. So the two stories we talked about of price discrimination and extracting rents out of future rivals, they both imagine the situation where there was a single seller that was pricing strategically. That was using these kind of terms in designing its contract. But you might also ask, and very frequently we run into this in actual cases, it isn't just a single-party seller that's potentially doing this, but there's competition among sellers, all of whom may be doing this, and they're competing for the contract. So you might ask, well, what effect does having exclusives or more generally loyalty terms have on the intensity of price competition?

And the answer, I'll go through it, is that it can sometimes increase the intensity of price competition and sometimes it can reduce it. So the simplest setting-- and whether it does is going to depend on what other terms firms can use in their contracts.

So the simplest kind of setting is to think about a situation with simple linear pricing. And there's a paper, an older paper by Mathewson, Winter, which originally looked at this. There's more recent work, which basically does the same thing, by Klein and Murphy and a comment by Zenger some of you may be familiar with, that basically says some of the same things.

So to think about this linear pricing setting, think first about a situation where we have symmetric firms. By symmetric, what I mean is the firms may have differentiated products, but they're sort of more or less mirror images of each other in terms of how attractive they are to consumers-- to sets of consumers.

So if you have fairly symmetric firms, competition for exclusives will intensify competition. And if you think about the extreme case where the firms are literally symmetric and they're competing for exclusives, in the end they may-- if they're symmetric for all buyers, it's going to turn out that they compete price down to cost. They'll end up earning no profits at all.

Now, that can make the buyer better off. It depends on whether that reduction in price compensates for the loss of variety.

On the other hand, imagine a situation where the firms are very asymmetric. One firm is dominant.

Now in that situation, competition for exclusives not only can lead to an exclusive. That is, a loss of variety. But actually, to an increase in price.

So to think about a situation where that would be true, if absent exclusives where both firms are being served, the dominant firm is dominant enough that the surplus the buyer earns from that firm is greater than what the buyer could get in an exclusive with the lesser firm, even at cost, then if you start from a non-exclusive situation, the dominant firm can insist on an exclusive. And when it does, actually the buyer-- even if it does that at the same price, the buyer would actually prefer to go with the dominant firm. There's that much surplus to be earned from the dominant firm.

Well in that case, the dominant can actually insist on an exclusive and raise the price. So an exclusive gives that dominant firm a lot of ability to extract more rents out of the buyers.

Now, that depended on the fact that it was linear pricing. And in particular, that the dominant firm had no-- basically, the exclusive was a way for the dominant firm to extract some of the surplus that the buyer was getting that it couldn't extract with a simple linear price.

So if you allow non-linear pricing, things change. In particular, the best equilibrium now for the buyer is actually to compete-- is to have competition only in exclusives. That is, whenever there's competition for exclusives, the buyers will be better off.

And sometimes you see this, a buyer insisting on an auction between sellers under exclusive terms.

On the other hand, that's going to be in inefficient outcome because one firm that should be in the market is going to be excluded. On the other hand, there are often other equilibria where, for example, the best equilibrium for the firms is going to turn out to be efficient and unaffected by banning exclusives.

So this may sound a little complicated. The bottom line is, if you have non-linear pricing, exclusives are going to turn out to be-- on the one hand, either good for the buyer or neutral for the buyer. On the other hand, inefficient.

Now the last set of papers in this area, there's a couple of papers by-- actually, this Calzolari. It's the same Calzolari, in this case, misspelled. Looks at having non-linear pricing but with unobserved buyer characteristics, which we think is often the case. That you can't perfectly price discriminate. You don't know exactly how much a buyer cares about your product.

And in that case, what happens is a couple of interesting things. One, you get back to the linear pricing results to a large extent. That is, with symmetry, competition is intensified. And the buyer may be better off or not.

On the other hand, if you have a dominant firm, the dominant firm, if you start having exclusives, is going to be able to end up extracting a lot of rent. Use exclusives to extract rents. The buyer will often be worse off. And moreover, it will often be inefficient.

Now, there's one other interesting thing that comes out of that paper, which is true both in the non-linear with unobserved characteristics and in that linear pricing case, which is share contracts. That is, loyalty contracts that are not exclusives, you start realizing have an effect that's different than just an exclusive.

And the reason is that if a buyer is subject to both that kind of-- is carrying both products, a share contract can end up essentially meaning that two parties can essentially tax or price the sale of a single good.

So if firm A and firm B are both selling to the buyer and firm A can essentially tax the sale of firm B's products, it's like double marginalization. And the price will end up being higher than it would otherwise be.

All right, three more stories to go. So the next story is facilitating a reduction in downstream competition. So this is a little related to kind of the cartel ringmaster story that Krattenmaker and Salop had in their paper. But it shows up more formally in a couple of recent papers. One by Inderst and Shaffer and the other by Asker and Bar-Isaac.

So the basic idea here is to imagine you have an upstream-- in the previous stories that I told, the buyers either were final buyers or they competed-- they didn't compete with one another. In many settings, of course, the buyers are downstream firms that are competing with one another.

So in that situation, an upstream firm, what it would like to do is to earn its profits is raise the price that downstream firms are buying at and then have them compete a lot in the sale of it. So that downstream firms don't earn many rents, but they limit-- basically, the high wholesale price limits downstream competition.

Because otherwise, if you set a low wholesale price and the firms downstream are very competitive, they'll dissipate a lot of profit that the vertical structure could earn. So you want to raise that wholesale price to limit that downstream competition.

The problem is if you do that and the downstream firms have other sources of supply, they'll go to that. The competition will mean that they'll start selling other firms' products. So what you can do is subject-- get the downstream firms to sign exclusives or loyalty contracts that limit their ability to go to other suppliers. So that's what happens in these papers. And by doing that, by subjecting the downstream firms to those restrictions, you can keep, basically-- the upstream firm can end up earning more profit.

All right. Now, sometimes raising that wholesale price-- or equivalently, I should have said a moment ago, another thing you can do is limit access to inputs in other ways, not just through a high wholesale price but just restricting quantity that you sell to downstream firms. Sometimes, it's difficult for upstream firms to do that-- to do that successfully.

And when that's the case and you want to limit downstream competition, exclusives that prevent the upstream firm from selling to certain downstream firms can be another way to limit competition.

So one story I like to tell in this is kind of imagine you have a supermarket and there's a potato chip aisle. And you have a dominant potato chip manufacturer. And it wants to limit competition among potato chip makers for consumers.

Well, if it just tries to buy aisle space by a quantity of aisle space, the problem is the supermarket has lots of other-- if it buys a whole aisle, the supermarket could take a little bit away from milk to sell to other potato chip manufacturers. And that may not be very effective at limiting competition.

A much more effective way is to use an exclusive or some loyalty share arrangement. And if it does that, it can just say, I'm the only potato chip manufacturer that is going to be in your store. Or, I'm going to get 80% of aisle space for potato chips. And that can be much more effective.

And in the literature, basically stories like that show up for example, if you take Hart and Tirole's classic paper, it's basically a story like that. That the upstream firm-- an exclusive will help the upstream firm limit downstream competition.

It also shows up in some recent empirical work, which I think is quite interesting. One paper by Robin Lee on video games. And the relationship between video game manufacturers and console manufacturers, where by having exclusives where a game is available only on a certain platform, you basically create product differentiation downstream. Thereby, reducing downstream competition.

Another example is a recent paper by Michael Sinkinson on the iPhone deal between AT&T and Apple, where a similar story shows up. OK, last story.

So the last story is not about reducing competition by foreclosing access to buyers. But rather-- by reducing access to inputs. But rather about reducing competition by foreclosing access to buyers.

So this shows up in a paper by Rasmussen et al and some work of mine. And there's been follow-on literature to this as well. So the basic idea is that loyalty contracts with buyers can deprive a rival of scale. And by doing so, reduce the rival's competitiveness.

Now, a key question in this which comes up from the Chicago School is, well, why would a buyer be willing to sign such a contract to limit competition that the buyer is enjoying?

And the answer in the Rasmussen et al and my paper as well is that externalities exist across buyers. Because, basically, preserving competition is a public good.

The profit to be earned from monopolizing one buyer effectively ends up being what funds the profits to other buyers. And in the original papers, there was just one initial incumbent. But work that I've done with Doug Bernheim shows that you can get similar kinds of effects where several firms are competing for a buyer to sign their contract.

Finally, those papers have final buyers. And there's been some work that talks about situations where downstream buyers, or I should say final buyers are retailers who don't compete with downstream firms that don't compete with one another that are in separate segments or markets. There's also some work looking at that previous literature and asking, what about if there's downstream competition?

One paper by Fumagalli and Motta ends up showing that exclusion could actually-- could be harder if the upstream rival only needs access to, say, a single downstream firm to get to the market. Then you basically have to sign everyone up to keep them out.

On the other hand, work by Simpson and Wickelgren end up showing that it can go the other way in that downstream firms may be relatively unaffected by upstream price increases because they pass them through. And that that competition can actually help you with exclusion. So it can go either way in this regard.

So I guess in summary, just to say there are many different stories. Some are good for consumers and some are bad. The ones that are good for consumers aren't necessarily good for aggregate surplus. So there are different effects for aggregate surplus.

The stories differ in who's subject to exclusives, buyers versus sellers. And they differ in the mechanisms. And they differ in what's important in those mechanisms. Sometimes you need long-term contracts, other times not, et cetera. So let me turn it over to Mike.

MICHAEL WALDMAN: Thank you. Time? How much time we got? OK, thanks.

So I'll try to be a quick so Mike has some time to talk about legal tests. So in multiple product loyalty contracts, a different issue comes up. And this issue I think was nicely stated in the paper by Greenlee, Reitman, and Sibley in 2008, which is basically in many circumstances the multi-product loyalty contract can mimic a tie. And the slide sort of goes through a simple example. And I'll just start very briefly, which is I have a monopolized product. I have one monopolized, product X. And the other product-- there's a rival.

And so what I do is I say, well, I'm going to set this really high price for X if you don't buy Y from me. And I'll give you a price discount, which might be the monopoly price, if you do buy Y from me. And basically, if the consumer puts enough weight on having some X, the consumer's going to be forced to buy-- it's going to be just like a tie. So given that, what could be driving multiple product loyalty discounts?

Well, anything that could be driving tying. And there might be some other things, too. Although, given that all the things that could be driving tying, my guess is it's also going to capture anything else that you might think about in terms of multi-product loyalty discounts.

So there I've given, I think, a pretty comprehensive list of what could be driving tying. I'm sure there are a few other things, but those are the main ones. It could be efficiency. It could be price discrimination. It could be hold-up theories. It could be extending leveraging market power. It could be preserving/strengthening market power and some other strategic motivations. So I'll go through these pretty quickly.

Lots of theories about how tying could be improving efficiency. Going back to work in the Chicago School, Evans and Salinger more recently in terms of reduced production and distribution costs. Ben Klein with-- I think it's Roy Kenney? Is that right, Ben? Had paper on economizing search and sorting costs. Barry Nalebuff talks about pricing efficiency. And there are other concerning the Cournot effect. And there are other stories about pricing efficiencies concerning bundled loyalty discounts.

And there's eliminating inefficiencies due to variable proportions. There's a nice paper by [INAUDIBLE] in 1980. And Dennis Carlton and I sort of apply it to aftermarket pricing in a paper in 2010.

And it would seem that in most of those cases, multi-product loyalty discounts could be applied. Although, in terms of reduced production distribution costs, there's an issue of why do you need to reference rivals as opposed to just [INAUDIBLE] discount? Although, I think the Topel and Murphy paper talks about some arguments for why you might want to reference rivals in terms of risk aversion.

But in other cases such as the variable proportions inefficiency, it's clear that you'd want to reference rival. So it's not hard to come up with stories with the efficiencies where you'd want to reference rivals. OK.

Two classic stories about how tying and bundling can lead to price discrimination. There's the Stigler argument concerning negative correlations and values. There's a number of papers, including a paper by Mike Whinston, McAfee, and McMillan showing that the negative correlation values is actually not a necessary condition.

And then there's classic metered sales argument that goes way back. And Ben-- and also a paper by Chen and Ross apply the metered sales argument to the aftermarket context in more recent papers.

And again, multiple-product loyalty discounts should be consistent, at least with the second rationale. Maybe not the first because the first talks about having monopoly in both products. So it's not clear the first applies. Although, my guess is there might be variants of the argument where it would apply.

Hold-up theories. There's a whole literature on aftermarket competition. Many of the theories in the aftermarket competition literature, as I've already mentioned, apply to-- are just taking basic tying theories, such as metered sales or variable proportions argument, and applying it to the aftermarket context.

There's a class of theories that applied just more directly to aftermarkets, which is these idea of hold-up. Which is I buy a product, I'm kind of locked in, and then the firm raises the price on the complementary product.

In this particular case, I'm not as clear that multi-product loyalty discounts applies just because of the timing issues associated with these hold-up theories.

Now, what's really sort of most interesting is the leveraging extending market power argument. That's what people are concerned about, that the multi-product loyalty discounts are used to extend leverage market power. So that goes back to the Chicago School. The Chicago School argument was, well, there's a single monopoly profit. These are papers by [INAUDIBLE], Posner's book, Bork's book. There's a single monopoly profit and so leveraging or extending market power doesn't make sense because you can get all your profits out of your signal monopoly.

Mike Whinston in a classic paper investigates that and shows that it's right sometimes, not right all the time. It's right when the monopoly good is essential. But if it's not essentials, for example, you had independent products or if you have some consumers who just want the tied good, then the Chicago School doesn't go through. And Barry and Mike show that in some analysis.

Now, just kind of one plug for one of my own papers with Dennis, which is that would suggest-- if that was the end of the story, that would suggest a very clear test or clear idea of when we should worry about leveraging market power, which is, is the monopoly good essential?

But that turns out that that relies on Mike's analysis being a one-period model. In a one-period model, you can have this basic story of you have a certain way of pricing the monopolized good and the tied good without tying. And you can show you can do just as well as monopoly profits by pricing the monopoly good at the bundle price minus the marginal cost of the complementary good. It's a really clever and insightful story, but it turns out that if you go to a multi-period setting, which is what Dennis and I do in our paper in 2012, that that argument doesn't generalize completely. And so that suggests that the kind of distinguishing when leveraging market power might make sense or not make sense isn't quite as simple as one might have thought after just looking at Mike's paper.

There's a number of papers that preserving/extending-- strengthening existing market power instead of leveraging market power. In Mike's 1990 paper, he also presents an example of that where there's an inferior monopoly product and the tying is used to kind of reduce pricing constraints from that.

Dennis and I have two-period models in which there's potential entry in the monopolized market. And so what the tying does is it stops entry in the complementary market, then in turn stops entry into the monopolized market down the road. And again, my sense is that the multi-product loyalty to contracts should apply to that.

Other strategic motivations. It could be product differentiation. Choi and Stefanadis have a nice paper concerning not having monopoly in either product but using the tie to kind of increase the probability of monopoly going forward.

Dennis, Joshua Gans and I have a paper on the ability of tying to shift rents. And again, we think those should apply.

One quick comment is-- and Mike pointed this out to me last week. I sort of knew that, and let me point out-- so one issue that comes up in the kind of leveraging-- in some of these strategic rationales is the ability of commit. And so my sense is that in the multi-product loyalty discount because the tying is occurring, if it's tying through the pricing itself, commitment is not as large an issue. But that hasn't really been worked out in detail and that would be a nice thing to work through.

The next step? My sense is that there isn't that much theory here on the multi-product loyalty discounts. It would be nice to see a little more theory to flesh out some of the similarities and differences between tying. I think they would be useful. There's some empirical work on tying, nice papers by Crawford and Yurukoglu and Ho, Ho, and Mortimer.

But again, there's not that much there. And the studies do focus on a narrow set of industries, which might not be the most important set of industries from the antitrust perspective. And there's very little or almost no research on multi-product loyalty contracts themselves as opposed to empirical research on tying.

And one question which arises, which is-- if it's playing the role of a tie, why do we see multi-product royalty discounts rather than tying? And maybe-- I asked this last week at a phone call. And Patrick's like, well, maybe what it is, is that the courts have a different way of dealing with the two issues. And it's easier to pass court attention if you use a multi-product loyalty contract. There you go.

MICHAEL WHINSTON: Thanks. We're on time.

Thanks. So I should just relate it to Mike's last slide. I should say because of the time, I skipped over a slide about empirical work on the single product contracts. So the one thing I should say about that, there isn't-- kind of like the tying multi-product case, there's not a lot of literature on it, empirical work. Especially empirical work that you really want to bank on.

But I think one of the things that is, I think, really quite interesting and exciting right now is that there's starting to be a set of more recent work on these kind of practices. Mike mentioned some on the multi-product front, but I had mentioned at one point in my comments papers by Robin Lee and Michael Sinkinson, young empirical scholars in industrial organization are starting to work on these issues in a quite interesting way.

OK, so let me just turn to legal tests. So I think there are a couple of key concerns that really drive one's thinking about what policy should be. One of course, is preventing anti-competitive actions that reduce consumer-- and I put a question mark there-- welfare.

I put the question mark because the comments before-- we often say we're interested in consumer welfare, but in some of these models there's different outcomes for consumers and society as a whole. And there's a question about how we think about that and what the objective is and how we resolve those differences.

The second issue, which I think is a very important issue as well, is reducing frivolous litigation. That's costly. It's good for economic consultants sometimes, but not for anyone else-- almost. Or lawyers, I guess. And deters pro-competitive behaviors is probably more important thing, which is competition we think works well. We don't want to dampen that and hurt that wonderful process.

So there are two main-- as Mike's review of the recent legal cases indicates, there are really kind of two different approaches that courts and others have taken and discussed. One is what you might regard as a very fact-specific rule of reason investigation of likely harms and benefits of a practice.

A different approach is applying the price-cost test. And I don't mean from a legal standpoint to say the price-cost test isn't part of rule of reason. We could call it part of rule of reason. But the people who describe the price-cost test and use it are thinking of it as a safe harbor screen that's going to be very determinative of many, many cases.

And basically, the argument for it often is an analogy with predatory pricing. So I think it's useful to think as we go through the day of the arguments that people give for predatory price, for using price-cost test in predatory pricing. And ask ourselves whether those common justifications for price-cost tests for predation apply here.

So I've listed them here. I've listed them in quotes because it's things people say and I don't necessarily even want to endorse them as things I would endorse for using the rule for predatory pricing. But we can just list them here and discuss them as the day goes on.

The first is the need to reduce frivolous litigation. So if we have some screen that does that, that may be a useful thing.

The second is firms may need a bright line. Commissioner Ohlhausen was referring to both of these in her comments.

Third, you might say that firms-- it's often said firms rarely have reasons to price below marginal cost. That may be an argument for actually condemning firms if price is below cost, not as a safe harbor. But the second piece of this relates to the safe harbor, which is that it's hard to identify above marginal cost predation. It would be difficult when price is above marginal cost to say whether the firm is sacrificing profits in the short run to exclude an entrant.

Another argument that's often given is to say that when price is above marginal cost, forcing a higher price sacrifices short-run efficiency for a speculative long-run gain. This is what's often referred to as the bird in the hand fall-- not fallacy, but the bird in the hand argument. We should grab that bird in the hand and not let go.

Another argument that's often given, and this phrase often comes up in discussions, is if price is above marginal cost, an equally efficient competitor can make sales. So I think actually even in the predatory pricing area, there's a real reason for asking ourselves why that is a compelling argument. But let me leave that aside for now and just-- we can leave that out there.

Another argument that you could give, which is related and I think a little more general is to say, if price is above marginal cost, a firm whose presence is efficient can make sales. By make sales, I mean profitable sales. So I should qualify this a little bit. And what I mean by this is, if price is above marginal cost, a firm that should be in the market for efficiency standpoints, if that pricing was fixed and the firm could perfectly price discriminate, it could come in and make profitable sales and be profitable.

So there's a variety of reasons. And we can ask ourselves as the day goes on whether we think those or some other arguments apply to using a price-cost test for loyalty contracts.

At the same time, I think it's important for us to ask what a structured rule of reason might look like. So for example, one question you might ask yourself is, are there some theories of possible harm that we don't think the law should investigate?

So for example, the fact that loyalty contracts may help with price discrimination. It may be that that could harm consumers, but maybe we don't want to entertain that as a valid argument in court. We could also ask what the elements or burdens are for establishing harms and pro-competitive effects. And should there be safe harbors other than price-cost tests?

So I think those are all of our comments.

[APPLAUSE]