FORDHAM UNIVERSITY SCHOOL OF LAW
FORDHAM COMPETITION LAW INSTITUTE

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Antitrust Economics Workshop
Morning Session Sponsored by Compass Lexecon

Welcoming Remarks

James Keyte
FCLI Director and Adjunct Professor of Law, Fordham Law School;
Director of Global Development, The Brattle Group

MR. KEYTE: Good morning, everybody.

This is the 45th Annual Conference on International Antitrust Law and Policy. I think it’s my fifth year as Director. Barry Hawk will be hopping around here somewhere.

We started the Economics Workshop four years ago. The notion is to have young lawyers, young economists, and enforcers from around the world get an earlier access to some of the economics that’s going on across a variety of topics. This year's sponsors are Compass Lexecon, which will do the morning session on two merger topics; and The Brattle Group in the afternoon will cover the *AMEX* decision and structural modeling. I'm going to moderate the Structural Modeling panel because I had some brief exposure to it and really had no idea what it was. I thought I knew these things, but I didn't. It should be a very interesting panel.

We're excited to have the Economics Workshop. It has been extremely useful, especially for the young lawyers who sometimes find themselves being asked to do things on cases or mergers or investigations and often have no idea what the senior people are talking about or what the economists are talking about. So this is a great way to get that kind of exposure, and it's also a great way, because of the international nature of the conference, to exchange some ideas on economics in the global setting.

Let's get started with Compass Lexecon. David Weiskopf is going to run the first panel. I hope you all enjoy it.

Thank you.

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Panel 1: Merger Remedies

Moderator:
David Weiskopf
Executive Vice President, Compass Lexecon

Panelists:
Mark Israel
Senior Managing Director, Compass Lexecon

Aditi Mehta
Economist, Antitrust Division, U.S. Department of Justice

Alex Okuliar
Partner, Orrick

Sonia Pfaffenroth
Partner, Arnold &Porter Kaye Scholer LLP

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MR. WEISKOPF: Hello. I'm David Weiskopf with Compass Lexecon. Welcome to the morning session of the Economics Workshop.

We'll begin with the first panel, which is Merger Remedies. We have a distinguished group of panelists with us this morning including two economists and two attorneys. The two economists are Mark Israel, Senior Managing Director at Compass Lexecon, and Aditi Mehta, Assistant Section Chief of the Economic Litigation Section of the Antitrust Division of the U.S. Department of Justice. The two attorneys are Alex Okuliar, a Partner at Orrick, and Sonia Pfaffenroth, a Partner at Arnold & Porter.

We've organized the session around several topics related to merger remedies. We'll start with an introduction and overview; then we'll discuss behavioral versus structural remedies, the intersection of merger remedies and merger efficiencies; and then, time permitting, we'll discuss issues in determining a divestiture buyer and ensuring it is an effective competitor.

The format is going to be question-and-answer and we welcome questions at the end of each topic and also at the end of the overall panel.

We are going to begin with an introduction and overview of merger remedies. Aditi, let's start with what is the purpose of merger remedies.

MS. MEHTA: The overall purpose of merger remedies is to effectively and quickly address the competitive harm from a merger. That requires determining the nature and the scope of the harm from the merger and then tailoring the remedy to address that harm.

As you’re crafting the remedy you really want to try and retain as many of the benefits and efficiencies from the deal as possible.

The other thing I’d say is the goal is to restore the competition that’s lost from the merger, not to increase the competition in the market relative to the premerger levels.

MR. WEISKOPF: What are the main types of merger remedies?

MS. MEHTA: Typically, the types of merger remedies are put into two categories, structural and behavioral. There’s also a third category that is a hybrid, conditions that look like behavioral remedies but are really put in place to make a structural remedy more effective.

When people talk about structural remedies, they are thinking about remedies that restore the competitive structure of the industry. Typically, this means a divestiture of assets, which can include plants, retail locations, customer contracts, that are sold to an independent firm in the market, and that can either be a new firm entering the market or strengthening an existing competitor in the market. These structural remedies tend to require very little ongoing oversight.

The second category is behavioral remedies. In behavioral remedies, the firms integrate fully, but then there are conditions or prohibitions put on their behavior or conduct. One example is a supply agreement where the merged firm is required to supply rival firms in the market. These are typically more difficult to implement and require some more ongoing oversight. So for example, a requirement to supply a rival may require conditions put on what price the merged firm can charge its rivals or how to deal with quality changes over time or new products.

The third category is conditions to strengthen a structural divestiture. For example, for a buyer of divested assets, t to be an effective competitor they may need access to certain intellectual property (IP) that the merged firm has. In that case there may have to be conditions on how the IP is shared between the merged firm and the buyer of the divested assets. These look like the conditions or prohibitions you may see in a behavioral remedy, but they're really there to strengthen the structural remedy and make the independent competitor in the market more effective.

MR. WEISKOPF: Thank you very much.

To what extent does the approach to merger remedies vary across jurisdiction?

MR. OKULIAR: David, would you like me to address that?

MR. WEISKOPF: Yes, please.

MR. OKULIAR: I'll do a survey of jurisdictions around the world and focus on the most active ones beyond the United States. I'll talk a little bit about the Federal Trade Commission (FTC) and Department of Justice (DOJ) but focus on DG-COMP, the United Kingdom, Canada, China, and South Africa.

First, most of these jurisdictions say that structural relief is good. They put it into the "good" bucket because of the reasons that Aditi just mentioned. They typically view behavioral remedies as problematic except in certain limited circumstances, like vertical deals.

But what's interesting is that a recent survey showed that in 2017 there were 155 remedies globally. Of those more than half, 52 percent, were behavioral or hybrid.

So why is that? You've got on the one hand most jurisdictions indicating that structural is the way to go, and divestitures in particular, for relief, but in fact they are actually implementing behavioral remedies. So there are a few reasons.

First, a lot of agencies are looking at vertical deals right now. As we know from some of the high-profile litigation here in the United States, there is a focus here in the United States and also in Europe on vertical matters.

Another reason is that there is a big focus on technology deals right now and will be into the foreseeable future, and divestitures typically don't work when you're looking at issues like data or technology access. So there are behavioral remedies typically imposed in those situations.

Another reason that I find fascinating is that there are really two groups of enforcers around the world. First, there is a group that does focus on structural remedies because it follows from their statutory mandate. So they have competition factors in either their statutory mandate or their common law. As a consequence, they are going to be looking for competition solutions. In those instances — that includes DG-COMP, the United States, the United Kingdom, Canada — typically their remedies are more than 70 percent structural. Those groups hold similar views.

There are some differences across them. For example, at DG-COMP the European process is a little different than the U.S. process with respect to remedies. Remedies tend to come at the end of the investigatory process. There is a submission of commitments or proposed commitments, which is what they refer to them as in Europe, to DG-COMP. DG-COMP does a market test and then, if it is satisfied that the commitments will address the perceived competitive harm, it will grant conditional clearance for the deal subject to finding a purchaser for it in a divestiture circumstance. Then there will be a submission of proposed purchasers and there is a review of the purchaser to determine if they have characteristics that would lead to success — independence, financial ability, operational capabilities, and the like — and then a final decree is issued allowing for the purchase to be consummated.

As a result, as compared to the United States, fix-it-first remedies are actually very rare in the rest of the world. Again, a recent survey showed that in the United States fifteen of twenty-one divestiture remedies were some form of fix-it-first, which means that the potential buyer was identified upfront by the parties and the agency; only six out of seventeen were fix-it-first in Europe or could be characterized as fix-it-first, six out of fourteen in the United Kingdom; and I'll talk about China in a little bit.

Also within this first group of jurisdictions that tend to focus on structural remedies, where they do look at behavioral remedies in recent years they've been tending to accept behavioral remedies earlier in the investigation cycle, in Phase 1 typically. What that suggests to me is that many of the issues are relatively easily resolved or relate to what I said before, a focus on vertical deals or on technology deals where something as simple as a firewall might remedy the competitive concern.

Where an investigation in these nations goes into Phase 2 and is a more in-depth investigation, it's very unlikely that a behavioral remedy will ultimately be used. In the last year I don't believe any such remedies have been passed at the European Commission or the United Kingdom. In the United States, overall I think 91 percent or better of remedies are divestitures.

That's the first group of enforcers.

There is a second group of enforcers that have a different statutory or common-law mandate in their countries that include public-interest factors or other types of market factors. This group includes China, South Africa, some of the Common Market for Eastern and Southern Africa (COMESA) countries in Africa. They have tended to use more nontraditional forms of remedies.

China, for example, has frequent behavioral remedies, oftentimes to protect for instance a domestic player or some other issue or concern with the national market. Last year, six of seven remedies were behavioral in China. There were three divestitures and only one of the three was a fix-it-first.

Some of the behavioral remedies that we've seen come out of China over the last several years have been supply agreements with Chinese domestic companies; IP licenses; there have been long-term hold-separate agreements that were put in place under consent decrees that have proven pretty controversial outside of China. *Seagate/Samsung* is a good example of that, if folks are familiar with it or want to look it up, the combination of two hard-disk drive manufacturers. The deal was allowed through, but the parties were told they had to keep the operations separately, and they ultimately were, I think, allowed to integrate about four years later. Last year there was a similar consent with a two-year automatic expiration date on it.

There have also been divestitures. In *Glencore/Xstrata*, which was a large mining deal, there was a divestiture of a Peruvian copper mine to some Chinese investors because there was a concern about supply of copper for the technology industry.

These are relatively nontraditional remedies that we've seem come out of the Ministry of Commerce of the People's Republic of China (MOFCOM) over the last several years, now the State Administration for Market Regulation (SAMR).

South Africa also accounts for a lot of what I think would be viewed as nontraditional remedies. There is also a broader public-interest mandate for the Competition Authority. They are very focused on employment in South Africa. One of the first examples of that was the *Walmart/Massmart* deal, where they did impose certain job and employment requirements on the parties. Out of the 155 remedies that I mentioned in this survey last year, thirty-four were from South Africa and were focused primarily on jobs.

That's my survey of the world.

MR. WEISKOPF: Thank you, Alex. Very

thorough. Much appreciated.

So, Alex, are there certain types of mergers or industries that are more conducive to theoretically sound and practically feasible remedies than others?

MR. OKULIAR: Yes, there certainly are, but I think the predicate question is: what constitutes effectiveness for purposes of a remedy? What's the right metric?

The International Competition Network (ICN), which has done a really great job in bringing nations together to talk about merger remedies and in putting forward best practices, has identified four factors that I think are pretty compelling that folks should keep in mind in determining whether a remedy is effective.

• First, does the remedy have a comprehensive or will it have a comprehensive impact on the putative competitive harm? That's why I think structural remedies, such as divestitures of lines of business, are so heavily favored, because they are viewed as being comprehensive in remedying the potential competitive harm.

Then you would look at whether there is a minimal risk of failure. In that you consider the package that is being divested: how high is the risk that the package is not viable, that you're only divesting, say, a select group of assets and to compete in the market the buyer would need a broader set of assets, for example?

Purchaser risk is another element that's looked at within the overall risk-of-failure factor. So you look at, as I mentioned earlier, whether a purchaser has the financial wherewithal, the operational capability, the managerial experience; their independence and intent to compete have been very important, at least in my time at the agencies; and also that the purchaser doesn't themselves present an antitrust issue in the purchase, so there isn't a huge overlap, for example, or a vertical issue.

There is also implementation risk, some of which is outside of the control of the agency and the parties — that would include for example macroeconomic conditions changing — or creating bad incentives as a consequence of the divestiture or the remedy that would incentivize the parties or third parties not to compete in the market or to circumvent the remedy in some way. That's factor 2, the risk of failure.

Number 3 would be practicality. One of the things that has bedeviled a lot of remedies in years past — there was actually just a paper on this about six months ago — is complexity in the remedy. For example, because in *Halliburton/Baker Hughes* there were twenty-three markets at issue, the DOJ ultimately I think decided that there really wasn't a workable solution, there wasn't a workable fix there, because it would be so complex. So a practical, straightforward solution is viewed as a way to be effective in remedies.

And then the fourth factor is the appropriate duration. For some remedies, as Aditi mentioned, you'll have behavioral remedies that are associated with or support structural remedies for limited periods of time. So it's knowing how to gauge the length of time, the duration, that the remedy is put into place for.

Ultimately, the bottom-line question you're asking is: Does the remedy package maintain or restore competition to premerger levels and does it create the right incentives for competitors in the market to compete after the deal?

With all of that in mind, I would say that in my experience obviously horizontal deals, where you can divest a line of business easily, where there aren't big brand implications to divesting the subsidiary or the division, are going to be the ones that are going to be the most successful typically.

I've seen those in the energy sector in oil and gas; I've seen it in manufacturing; chemicals; pharmaceuticals, where you have a pipeline drug or where you can shift or transfer the manufacturing easily from the divestment parties to the purchaser; and then retail is another area where you can see a lot of success.

MR. WEISKOPF: Okay, great. Thank you so much.

Before opening up for questions from the audience, panel members, any comments or thoughts so far?

MR. ISRAEL: I can jump in with a couple of thoughts on remedies generally.

One thought I had is that it seems interesting to me that this topic is part of the Economics Workshop because one thing I find in practice on the side of the merging parties is that often the economists for the parties are heavily involved in the merits and debate about the merger and whether it’s procompetitive overall or not, but then when it comes to remedies the economists are often somewhat sidelined. So I think it’s good that we’re talking about it in an economics workshop because I think sometimes what happens is there is a debate about the deal on its face and then when it comes to remedies it sort of turns into horse trading a little bit for what's going to be acceptable and what's not and there's not as much economic analysis.

I think that is just a sort of plea. It goes with the theme, I think, that I almost would rather not call them remedies. Really what we're trying to do is to restructure a deal in a way that would make the deal pass muster from an antitrust point of view, the same way deals get shaped to pass muster from the financial and strategic point of view and then there's an antitrust process to deal with that part of it too.

Generally, very early on in the process, probably from day one, the first time a firm calls a lawyer, they know the lawyer can tell them, "You're probably going to need to have some sort of fix or you're not." In my experience, these things go best when economists and lawyers are involved early on trying to shape that in a way that makes sense. I think you end up with fewer problems. We'll come back to this more, but one thought is just there probably needs to be more economic analysis of remedies.

One other thing, just reacting to some of what Alex said, just picking up on that, one thing I find that happens in practice is both internationally and across agencies there can be interesting issues about these differing views on remedies and how that affects the outcome. Sometimes they don't align very well. Just something else to watch out for as you're working on them, so sometimes the different views that different international agencies have on remedies don't align well.

Just one example, in airlines there are airline alliances — OneWorld and Star — and these alliances need to get antitrust immunity. Historically, they obviously had to go in front of regulators in multiple jurisdictions. Historically, in the United States, if there were specific routes, say between New York and London, or something where people were worried about competition issues because the carriers that would be in an alliance would otherwise have competed, the United States' approach to remedy that would be to allow antitrust immunity but to carve that route out, so the airlines can talk about coordinating your schedule and pricing on some routes but not that route. Whereas the European approach tended to be to ask for some slots — "We need slots at Heathrow to give to other competitors" a chance to compete. It creates an interesting tension. You end up giving sort of a double remedy for the same problem because there are different views.

The same thing can happen even within the United States. If you work on, for example, communications mergers, which have been hot, if the DOJ and the Federal Communications Commission (FCC) are both involved, they may have different views on remedies. I think a place you would see more behavioral remedies might be if another noncompetition agency was involved. I think, in addition to this international question, an interesting issue to watch out for is when different agencies have different views on what the remedies should be.

MS. MEHTA: I'll just add to what Mark said about the role of economists in evaluating merger remedies. Especially because so much of what the right remedy is depends on what the theory of harm is from the merger, there's a really important role for economists in doing that.

I'd say at the Division economists are involved in the remedy discussions and figuring out what the divestiture package has to look like, for example, to make for an effective competitor in the market, and I think it's really important that economists play that role.

MS. PFAFFENROTH: I would add from the practitioner perspective that, building on what Aditi and Mark said about effective remedies and what's going to be necessary to remedy a concern, there can be a tendency on the part of business to want to approach a remedy negotiation with the government like one would approach a business negotiation, saying, "Well, if you say one plant and I say three plants, then two plants is clearly the correct answer. That's where the effective remedy is."

But from the perspective of the agency what they should be trying to do is convince the agency that in fact what is being offered as a part of that divestiture package or that asset package or the business that is being proposed to be spun off is in fact going to be effective, meaning, as Aditi said, that it's going to maintain the competition that exists in the market premerger.

Helping businesses to understand that it has to be approached from that perspective to be persuasive to the agency is something that's important because it's more in terms of explaining why it is that this specific divestiture is going to be able to maintain competition, as opposed to trying to find some reasonable middle ground from the perspective of simple negotiation.

MR. WEISKOPF: Any audience questions or comments before we move on to the next topic? And as I said, there will be an opportunity at the end as well for any questions or comments.

[No response]

Moving on to the next topic, which is focusing on behavioral versus structural remedies in particular, Sonia, what is the difference between those two types of remedies and why do antitrust enforcement agencies tend to favor structural remedies over behavioral remedies?

MS. PFAFFENROTH: Aditi explained at the beginning that you can separate different types of remedies into a structural bucket or a behavioral bucket.

If you're talking about the structural bucket, what you're thinking about is what you think of as a stereotypical remedy in a horizontal merger case, so a merger between competitors, which is changing the structure of the transaction to eliminate some competitive overlap. That may be by selling off tangible assets, by spinning off a standalone business, by selling overlapping IP, by looking at pipeline drugs. But it's a question of looking at changing the structure of the transaction such that whatever competitive concern is created by the combination is mitigated by the remedy that's being imposed.

In the context of a structural remedy, the agencies typically have a preference for a standalone business. That certainly is not possible in all situations, but that goes to what Alex was saying: how effective is this remedy going to be? The concern is going to be if you are taking simply assets and giving them to another market participant or someone who is not currently a market participant, are they going to be able to compete with those assets in a way that one of the merging parties would have been able to do premerger?

Because of that preference overall for a standalone business, there’s also more resistance to mix-and-match type remedies or overly complex remedies that are taking pieces of both businesses — and I think you could see this in what was said about the *Halliburton/Baker Hughes* merger — creating a very complex remedy gives the government less comfort that that divestiture is going to in fact remedy the harm that they have identified from the merger.

On the behavioral side, this can encompass a fairly wide range of merger conditions — Aditi talked about supply agreements — basically in a behavioral remedy you’re talking about something that is going to change the conduct or the behavior of the merged entity post-merger in some way. It may be a question of restricting conduct that they might otherwise have undertaken, it may be a question of compelling conduct that they would not otherwise have chosen to take, but in some way it is changing the ability of the merged entity to operate post-merger.

This is something that is frequently seen in vertical mergers, as Alex said, because in a vertical merger there may be no structural remedy; because you have two companies that are in fact not competing, it doesn't have that stereotypical overlap where you take the overlap away and you remedy the concern.

Types of behavioral remedies can include:

• As Aditi said, supply agreements of some typically limited duration to allow a divestiture buyer to be able to put itself in a position to replace the competition that was lost.

• It could be a question of firewalls. In a vertical case, if you have a manufacturer acquiring a supplier, like was the case in the FTC's recent *Northrop Grumman/ Orbital ATK* merger, there can be concerns about information flow. If that supplier is still doing business with competitors of the acquirer, the agency may be concerned about flow of proprietary information.

• Nondiscrimination provisions. Similarly, if a manufacturer is acquiring a supplier, maybe it's one of very few suppliers, and there is a limited opportunity for competitors to the acquirer to be able to get that component, then the agency may look for nondiscrimination provisions to ensure that inputs in the future will be supplied in a nondiscriminatory manner, that the competitors aren't going to be cut off from necessary inputs.

• There could be future licensing requirements if there is, for example, a history of licensing a certain IP, to ensure that going forward licensing is done of fair, reasonable and nondiscriminatory terms.

• Anti-retaliation provisions. For example, you could have a provision that says, "Well, if your customers purchase from a competitor in the future, you can't retaliate against them" or "You can't retaliate for reporting potential violations to the government."

• And of course supply agreements could also have restrictions on contracting saying "The business can't enter into *X* type of exclusivity."

So there is a wide range of types of remedy that can be imposed that would fall into that behavioral bucket.

From things the other panelists have already said, the reason why there is a preference on the part of the agency for structural remedies, notwithstanding the fact that behavioral remedies may often be seen as a part or a whole of a remedy in a given transaction, is that there is that certainty that there's a separation between the merged entity and the divestiture buyer, there aren't restrictions on future conduct.

That's not to say that a structural remedy itself can't be challenging, because it can be, in terms of identifying what all the necessary assets are going to be for a divestiture buyer to be able to compete; in terms of finding a feasible buyer that is going to have the same incentives to compete, as Alex was saying; that is going to have the ability and the experience to be able to compete in the way that one of the merged parties would have.

But, all of that said, a structural remedy is still something that is definitive in terms.

When you have a behavioral remedy, you have something that is in fact controlling the competitive conduct of a business going forward. That presents enforcement challenges. It requires ongoing monitoring to make sure, for example, firewalls are being maintained; to determine whether contract terms really are nondiscriminatory. It can be challenging on the part of the agency to draft that type of remedy because it is forward-looking and trying to set out restrictions that will achieve the goals of the remedy while not being overly restrictive because that could negatively impact the efficiencies of the transaction because the remedy is distorting competition in the market to a certain extent. The agency is also interested in avoiding loopholes, to avoid the possibility that the merging parties can end-run around the intent of the remedy and thereby not achieve what the government is looking for in terms of a remedy.

There is always going to be a challenge inherent if you are putting constraints on how a business will compete in terms of particularly a dynamic market — if the market changes, maybe it gets beyond what that constraint was, maybe the constraint is no longer necessary and maybe the constraint is overly restrictive.

And they are of limited duration. Unlike a divestiture in which you sell the business, the business is gone, the business is conducted by someone else, behavior remedies necessarily are going to have a term limit.

MR. WEISKOPF: Thank you very much.

Also, any comments on the FTC Merger Remedy Study that relates to this topic?

MS. PFAFFENROTH: The remedies study is quite interesting because it looked at — and this is following on a previous study — all of the merger orders between 2006 and 2012. There were eighty-nine in total. It assessed whether those merger remedies were successful. Some were, some were not, but for the most part they found that the remedies were successful.

I think particularly interesting to the discussion of structural versus behavioral remedies is that, unlike the previous study, which did not look at vertical mergers, there were four vertical mergers with remedies that were assessed as a part of this remedies study. The measure of success was whether competition was maintained in the market, or restored if that was the case after the fact, and whether there had been enforcement of the behavioral conditions. In all four of the vertical transactions the FTC found that they were successful remedies.

So I think that there can be a takeaway from that that certainly it is very case-dependent, as Alex said, as to whether there is going to be a transaction that is going to be susceptible to having a successful remedy.

It may be that there are transactions in which a successful remedy is not possible. However, there is the demonstrated look-back because the FTC has the ability to go back and really dig into those transactions and get information and talk to market participants and find out what the effect was after the fact, to be able to look back and say, "Yes, in *X, Y, Z* cases these were in fact effective remedies; they did maintain the competition in the market, they did what they were supposed to." That is something which has been the case in those specific behavioral circumstances that were looked at.

MR. WEISKOPF: Thank you.

Mark, are behavioral remedies a useful tool to offset expected merger harms; and, if so, can we systematically identify the proper circumstances and types of remedy?

MR. ISRAEL: Sure. I think they can be part of a toolkit to deal with harms that have been identified.

But I guess I would say, to jump into the second half of your question, the way I think about it is — I may be overgeneralizing — I don't think you see many situations in which a deal is anticompetitive on its face and the agencies have major concerns about the deal as a whole in which pure behavioral remedies will solve the problem — and by behavioral remedies I really mean situations where you think the merged firm has the incentive and the ability to harm competition, to raise prices or reduce output, and they simply promise not to. If you really think that sort of incentive and ability is created by the merger as a whole and you're just trying to regulate it away by saying "Here's a price regulation or something we'll put on you," that strikes me as not usually adopted and unlikely to work.

I think behavioral remedies are generally part of the solution when maybe you think the merger as a whole is generally good and has benefits but you're concerned about specific aspects of the deal or specific segments or specific products or you can identify a specific place of concern.

I think behavioral remedies, like I said, are likely to work really if it's a narrow sort of specific targeted part of the concern and if the concern is relatively well defined as far as what you need to do, in the sense again that it means you're not trying to fix an overall anticompetitive deal with a price regulation or something. But also to me I think the most important thing in a behavioral remedy is it needs a clear benchmark. Often firms will come and say, "We'll promise not to raise prices." "Well, what would your prices have been absent the deal, and what does that even mean, and how else might you affect competition?" Many firms in an industry where prices have been declining rapidly will come to regulators and say, "We promise not to raise prices." Obviously, that's not going to get very far.

But I think if you have a more narrowly targeted remedy, then you can have a benchmark. So in some deals you might be concerned about competition at a lower-quality, low-price part of a market — say in telecom or something there's a lower-end product and there's a higher-end bells-and-whistles product — and maybe in some wireless phone merger or other merger that might happen there's concern about some particular segment of the industry. In that case, maybe you would say, "Today you offer a package that has 75 percent as much data at 75 percent of the price and we would like a commitment that you will continue to offer a package that has that proportion to your top package," such that if the market evolves the remedy can change relative to a well-defined benchmark.

So I think if you have that kind of narrow setting — here's a set of customers, we're worried about a certain geography, we want to maintain the products that are offered in that geography and the prices relative to something else that's being done where we don't have competitive concerns — you have to be careful that doesn't create strategic incentives to mess up all the pricing -- but if it's a narrow enough part and you can define a benchmark relative to the broader industry or relative to other products that the firms sell, then I think there is some chance to actually be able to enforce it.

MR. WEISKOPF: Having a flexible remedy may be very important in certain circumstances.

Mark, are there instances where remedies other than divestiture should really be thought of as structural remedies?

MR. ISRAEL: It is interesting. The way I would take that is to say it's not obvious to me this is the right way to ask the question. It's natural to define structural as meaning you change the structure of the industry or the structure of the firm, and by that we might naturally mean divestitures, and behaviorally you change the behavior of the firm.

I would say is it’s not obvious to me those are the most interesting questions or the most interesting way to think about remedies. You could hear a lot of this in Sonia’s answer as far as there are issues with both types of remedies.

So I would slightly change the question and say when I think about remedies, I actually want to ask maybe two or three different questions rather than whether they are structural or behavioral.

I think the most important first question is: does it require ongoing enforcement? I’ll give some examples in a minute of things that maybe are not classically structural but don’t obviously require ongoing enforcement, at least not by the DOJ or the Antitrust Agency. That’s important too, right? A big part of the issue I think is that the antitrust agencies are generally not regulators, that’s sort of the opposite of their purpose, and so it’s natural not to want to require them to be ongoing regulators. So to me question number 1 is: Can you put in place and let it go, or does it require ongoing oversight?

Question 2 would be: if it requires ongoing oversight, is there some expert agency or court or someone who can do that in a way that's easier than the agencies? So communications deals where the FCC is involved, airline deals where the Department of Transportation is involved, might more naturally have things that look behavioral but don't require ongoing oversight, at least by the antitrust agencies, but somebody who's more of an expert agency can do that.

Third, and probably what I think is the single most important question — and it goes to what Sonia said exactly — is: is the remedy in the situation one in which the firm still has the ability and the incentive to harm competition and they are promising not to do it? To me that's the classic behavioral remedy.

But to me the key question is really: Does the remedy, whether it's structural or not, do something about the ability and the incentive to harm competition? I will give some examples to make that more concrete.

In structural remedies these issues about whether there is ongoing oversight can easily be a problem. As Aditi mentioned, often you have to have a structural remedy plus some three-year deal to continue to provide IP or something. That has to be overseen, so now structural remedies, as Aditi said, are blurring over into behavioral.

Most of the debate we always have about structural remedies is: do they really eliminate the ability and incentive to harm competition; have we created enough competition to fix that problem?

So I think you're naturally asking those questions about structural remedies. I think you should be also asking those questions about behavioral remedies, or what we call behavioral, and I'll just give two examples.

In some cases it might be there are a few large buyers of a product that might be harmed and the merging parties are able to enter into a contract with those buyers in advance. Now, do we call that contract structural or do we call it behavioral? I think what matters is that contract could be enforced through the courts, if they are large enough buyers, they have the ability to self-enforce, and we can look at the terms of the contract and see if it actually solves the ability/incentive problems that we're concerned about. So even though we might call that behavioral, I think we would evaluate it according to these same questions.

The one other example I'll give, which is topical recently, without getting into recent cases, is a remedy that has an arbitration provision. Lots of vertical deals, but even some horizontal deals, can say, "If you're worried about some specific competition issue, we could have an arbitrator evaluate that if it comes up." To me that one is interesting in a couple ways.

(1) Again, the agencies don't have to be involved, they can use the arbitration process, so it is sort of self-enforcing.

And then (2) — and this is where it has come up in recent deals — if the theories of harm are about changing relative bargaining power. A lot of recent investigations are about a merger might give one side more bargaining power than the other side. One solution to that might be to say, "We're going to give the other side the ability to take things to arbitration if we think that the bargaining is being done unfairly." That's a tool given to the bargaining of the other side.

I don't think we as economists yet know the answer perfectly to when arbitration works and when it doesn't, but I would say those sorts of arbitration and contractual solutions ought to be evaluated in the same way we evaluate what I think of as other structural solutions and asking to what extent do they fix the incentive and ability problems, as opposed to cabining them into these separate structural and behavioral buckets.

MS. MEHTA: To a large extent, having arbitration as a remedy really depends on how effective the arbitration can be.

MR. ISRAEL: Right.

MS. MEHTA: So it comes back to some of the same problems: can you figure out what the competitive but-for price would have been, and that is going to affect the bargaining dynamic, and effective arbitration may not change that.

MR. ISRAEL: Certainly I agree and that’s one thing we have to think about. I think the interesting cases are these cases in which the theories of harm are about bargaining because then the ability to go to arbitration is part of the bargaining game. You are modeling what is the nature of the bargaining, so I think the cases where arbitration works best is where things never go to arbitration.

It’s not the ability of the arbitrator to find a perfect solution.

You do have to have an arbitrator who’s not inherently biased, but if the arbitrator is not inherently biased, then the expectation of both parties is “If we go to arbitration we’ll end up at some sort of solution.” I mean you have to know what that solution would be, but they’re thinking about “What would happen if we go to arbitration?” If it works well, I think it’s because it changes the nature of the bargaining game in a way that changes some of the incentives and abilities we are worried about.

But that said, I don’t disagree that an obviously ineffective or captured arbitrator would not solve the problem.

MS. MEHTA: And I’m not just talking about a captured arbitrator; it’s just arbitration can be hard. Figuring out what the right but-for price is a difficult exercise, and especially if there are changing conditions over time or unforeseen changes.

It’s not necessarily that there’s a biased arbitrator; it’s just that that can be a difficult exercise to undertake.

MR. OKULIAR: Going to Sonia’s point earlier, just having arbitration generally can place a burden on the parties going forward that would distort competition long term.

MR. ISRAEL: Just one comment. I agree with all that. I think it’s an interesting topic to discuss. I think that’s why the standard for good arbitration — and it has worked pretty well in some FCC cases — would be arbitration that almost never gets used but that creates a backstop against which there are some bargaining concerns we might have. It doesn’t force the arbitrator to find the perfect price; it just means each side faces some risk if they go to arbitration, which can create incentives to reach a deal.

I think the best economic research on this has been done more in the IP/patent FRAND setting, where bargaining in the shadow of arbitration can work more effectively than bargaining absent the shadow or arbitration, and what you hope is that that shadow creates the right incentives to reach a deal.

MR. WEISKOPF: Just a quick follow-up on that. So are we talking about more of a dynamic game here in terms of the underlying economic theory, or is this more of a static negotiation where you don't really contemplate sequential negotiations and possible arbitration along the way? Sorry, but the economist in me had to ask that.

MR. ISRAEL: I don't know. Bargaining games are hard. I think we generally model them in some static sense.

I think, to get technical for a second, if you are doing a Nash bargaining model or bargaining models people often use, these models can admit outside options. So the two sides are bargaining and negotiating, but with arbitration (or whatever it is) there can be an outside option, a way to leave the bargaining game and start some other game. So I think the models would be imagine two parties bargaining but one or both of them has some outside option to go invoke arbitration.

If your question was then do we add to that multiple rounds of negotiations with different parties each of whom may arbitrate, I'd love to, but I don't think the economics of bargaining is that advanced.

MR. WEISKOPF: Fair enough. Yes, I think we tend to revert to static models for a lot of the work that we do.

Any other panel comments?

MR. OKULIAR: Just one last quick comment while we're talking about these different structural versus behavioral remedies.

I thought one of the things that was interesting that came out of the FTC's merger retrospective remedies study was that it looks like 100 percent of the line-of-business divestitures they deemed successful; 100 percent of the vertical behavioral remedies were deemed successful, but roughly a third of the sale-of-asset divestitures were deemed unsuccessful, so only two-thirds were successful. That points to a lot of potential issues, a lot of risk associated with those types of asset divestitures.

It also points to the informational asymmetry that I think, Sonia, you were referring to, on the part of the agency staff. They are excellent in their jobs, but they're not market participants, they have a limited window into what is going to potentially work going forward in the market, and so when you have staff actually working with the parties to structure a deal, trying to guess which assets are the right ones that are going to be viable, I think that has been at least shown in this one study to be potentially problematic.

MR. WEISKOPF: Fair enough.

Shifting gears a little bit, we are going to talk about the intersection of merger remedies and merger efficiencies.

Aditi, what is the relationship between merger remedies and merger efficiencies and how does it vary according to the type of merger remedy and efficiency?

MS. MEHTA: The goal of merger remedies is to address the competitive harm but retain as many of the efficiencies of the deal as possible.

In some cases crafting a remedy that retains the efficiencies can be as straightforward exercise. You can imagine there's a merger between two companies that have plants all across the country but the only overlap between the two companies is, let's say, in the middle of the country, and so you are worried about local customers who are purchasing in that part of the country. The efficiencies in that deal may be something like increasing the distribution network of the merged firm, which may allow them to better serve national customers or reduce their transportation cost let's say.

In that case you can imagine crafting a remedy where the merged firm has to divest some of the overlap assets in the middle of the country. That still allows them to retain the efficiencies from the deal, the broader distribution network, but does remedy the competitive harm.

When we're thinking about crafting a remedy we're thinking about how the efficiencies of the deal are affected. But we're not only thinking about the efficiencies to the merged firm. We also think about creating an effective competitor that can restore premerger competition: what about the efficiencies to the purchaser of the divested assets?

In this example, the purchaser of the divested assets is only going to get the plants in the middle of the country. Does that put it at a disadvantage relative to the merged firm in a way that would not allow them to effectively compete and restore premerger competition?

When we're thinking about the efficiencies, we're thinking about for the merged firm post-remedy can they still get some of the efficiencies from the deal but also thinking about are we making an effective competitor with the assets that are being divested.

I think those are at least two ways that we think about the interplay between merger efficiencies and merger remedies.

There are more complicated cases where it is not going to be as simple to retain the benefits of the deal and still address the competitive harm.

For example, you can think of a case where the merged firm uses the same assets both for the product where there is an overlap and for products where there is not an overlap and add to the efficiencies from the deal. In cases like that it is going to be harder to craft a remedy that both addresses the competitive harm and retains a lot of the benefits of the deal or the efficiencies.

MR. WEISKOPF: Thank you.

Mark, should the goal of remedies be to restore premerger conditions or to maximize consumer welfare considering the effect of merger efficiencies? Which of these goals do the enforcement agencies tend to focus on?

MR. ISRAEL: I think they focus on both, at least in theory. I guess this is a question where at least as economists — I'll make an extreme version of the statement — I think most economists would agree that the goal ultimately should be to craft a deal that maximizes consumer welfare, but in practice the focus ends up probably a lot more on whether the deal restores premerger competition.

This probably goes to a whole different panel that has been done and will be done again about the relative weight that harms and efficiencies receive in merger review, but I certainly think it's true that there can be a tendency — remedies are complicated, as Aditi said, and there can be a tendency when they get complicated to focus more — if there is one of these situations in which there is a tradeoff between the efficiencies and the harms and they're happening in similar places, I think there can be a tendency to focus more on "Let's make sure we restore the premerger conditions and not think as much about the efficiencies."

This really comes up — again I'll say more from what I know, which is the private party side — there are lots of cases I've been involved in where there is one workstream which is evaluating the merger and arguing for the efficiencies from the merger and why the merger is good, and then there is a separate workstream that is happening on what the remedy should be. In some of those cases maybe I as the economist would be heavily involved in the first workstream but not in the second, and so then you get to see the remedy package that is being proposed later in the process and it sort of entirely undoes all of the efficiencies that you're arguing for, it divests all of the assets that are central to those efficiencies.

That's part of my appeal earlier, working with the private parties and working with the agencies, is to have the economists more involved. I actually agree with what Aditi said earlier; it seems to me that the economists at the agencies are generally pretty involved in the remedy discussions, but Aditi can probably say that at the meetings she goes to that have the least economists from the parties are the remedy discussions. I think that one thing that could happen there on both sides is the efficiencies part of the story can get lost.

An example is airline mergers. I've work on a bunch of airline mergers. This is a classic case in which the core efficiency of a good airline merger would be bringing two airline networks together to create more connectivity and a bigger airline network. The key to that happening is that you bring these two networks together. But the key to bringing these two airline networks together, the tie that binds those networks together, is going to be a small set of routes that connect their hubs. The ideal merger would be one airline on one side of the country and one on the other and they're connected by one route through the middle. That route is going to be the key to the efficiencies from the deal and it is also going to be the focus of the potential harms from the deal.

I don't have a perfect solution here. I would just hope that the benefit and the harm side get discussed. Probably it does in airlines, but in other deals the focus will just be more "We've got to fix that harm and the efficiencies be damned."

One other thing, building on what Aditi said. I do think it is a common question on this efficiencies-versus-harms question — and it's something we have to watch out for — is the efficiencies come from economies of scale.

This is another two workstreams thing that happens. One workstream says you can develop the arguments that economies of scale are the key and that's the source of efficiencies. The other workstream says develop the argument that a remedy that starts some new entrant will be a full fix to competition. There is obviously tension there potentially in terms of whether the scale economies are required or not.

One thing that often helps me reconcile these is that I think the right way to think about that is that you are trying to recreate the smaller or the acquired firm. So it can be the case that the merged firm can gain efficiencies from scale but still recreate a firm that's not in a worse position than the smaller of the two of them was at the beginning in an ideal case.

But again that's a place where I agree the efficiencies versus the harms can come into tension. I don't have a perfect answer, except to say if your efficiencies are going to be credible and if this is going to work, you better be thinking about that interplay from the beginning.

MR. WEISKOPF: Thank you.

Alex, are there specific industries or types of mergers or remedies where the two goals are likely to diverge the most — that is the two goals (1) restoring premerger conditions and (2) maximizing consumer welfare?

MR. OKULIAR: I think there are certainly types of remedies where these two goals can diverge, mostly behavioral remedies.

In a lot of technology deals that involve either data or intellectual property or other types of access to technology as part of a remedy, you have a situation where there is potentially a temporal mismatch, where you have short-term increases in efficiencies as a consequence of giving competitors access to, for example, data or standard-essential patents or other intellectual property; but over the long term there can be a chilling effect on innovation that can harm efficiencies over the long term and it can harm consumer welfare over the longer term. I think those types of remedies most likely tend to be problematic.

I would also look at remedies where there is an attempt by the agencies, as I mentioned earlier with respect to the asset divestitures or single-asset divestitures, to improve the market, where you see agency staff or the parties working to better the market and to move it to a new level. You can end up with significant implementation risk and failed remedies that ultimately harm consumer welfare.

So those are two.

And then Sonia mentioned horse trading or negotiation. That kind of falls into the same bucket as the single-asset divestitures, where you have the agency staff and the parties negotiating back and forth and they say, "Oh, we'll just go for the middle between the two of us." That's also a situation where you could have a mismatch between these two ends.

MR. WEISKOPF: Excellent. Thank you.

Any other panel comments before we move on to the last topic?

MS. PFAFFENROTH: I would just add to what Alex said that I think another situation in which you may see a divergence and in which remedies can be challenging are where you're looking at a transaction that has effects in both upstream and downstream markets. If you're looking to remedy harm downstream, what's the effect upstream, are you reducing efficiencies upstream, and how do you then weigh what the effect is on the overall procompetitive aspects of the transaction, on trying to remedy harm in one of those two markets?

As Alex said also, in evolving markets, dynamic markets, you're imposing a remedy, you're looking forward, you're trying to see where that market is going to go, and it may be, particularly in the context of a behavioral remedy, that the remedy is constraining that evolution in some way that might work against the overall goals of the remedy.

Going back to some of the things that Mark was saying earlier on, the remedies and the efficiencies that you can realize from a transaction are necessarily going to be intertwined. If you're imposing a remedy, if you're changing some aspect of the transaction, whether it's by imposing a structural remedy and spinning off assets that would otherwise have been able to be used synergistically between the two entities, it may be that the synergies are particularly significant because in fact there were significant overlaps. So there may be a tension between the remedy and the overall efficiencies of a transaction.

But whether it's a structural remedy where you're selling off a piece of what would have otherwise given rise to synergies in the transaction or if it's a behavioral remedy where there's an ongoing restraint on some aspect of the merged entity's ability to compete that is distorting the market that is changing incentives going forward, it is necessary to separate that from what the efficiencies would have been had the parties simply been able to combine the two companies. Any remedy is likely to have some effect on efficiencies, a negative effect diminishing the efficiencies.

I think that what that also highlights is how important it is to narrowly tailor remedies in merger cases to make sure that the remedy isn't broader than it needs to be to address the harm because the broader the remedy the more impact it has on the efficiencies of a transaction.

That's not to say that there may not be situations in a structural remedy where there is a manufacturing facility and it is shared by more than one product and only one of the products is an overlap, but you cannot set up a divestiture unless you spin off that asset, that is going to have an impact that is broader than necessarily what is absolutely required to address the overlap in the transaction. It may be necessary, but it is going to have therefore further effects on efficiencies.

So where it is possible, particularly in the case of behavioral remedies where you are changing the competitive dynamic, to cabin that, to make it narrow, as Mark said earlier, that is going to be a more effective remedy. Where it is easily definable and there are parameters around it and you can cabin it, that's going to affect the efficiency of a transaction less.

MR. ISRAEL: Just one last comment. I think one place sometimes we get in trouble and lose sight of this balance is when remedies are designed to hit some structural screen that we're worried about.

I'm not even sure the agencies want to do this, but a lot of parties come in and say, "Compute the Herfindahl-Hirschman Index (HHI) in every local market and we need to spin off anyplace the HHI post-merger is over 2500"; or they will say in telecom deals, "There's some spectrum screen and we've crossed that"; or you get calls saying, "Compute every local market and find where all the Upward Pricing Pressures (UPPs) are above 5 percent and we'll form a divestiture that way." I'm not even sure the agencies are that structural. Sometimes it's the firms themselves that want that kind of certainty upfront, and you'll say, "(a) that's not a great way to design a remedy and (b) it probably doesn't even give you the certainty that you want."

But on both sides I think when it's purely structural and it's like "Let's just hit an HHI limit" is the place I see we lose sight of this balance.

MR. WEISKOPF: Fair enough.

I think we are going to have time for the last topic. We want to talk about the issues in determining a divestiture buyer and ensuring it's an effective competitor.

Let's start, Sonia, with some of the characteristics that antitrust enforcement agencies look for in a potential divestiture buyer.

MS. PFAFFENROTH: A lot of this goes back to what Alex already covered when he was talking about what it takes to make an effective remedy.

If an agency is looking at a divestiture buyer, it wants to make sure that that buyer is financially stable; it wants to make sure that it is going to stay in the market, that it has the ability to compete the assets. Something the agencies may look at is to see whether that divestiture buyer is going to require financing from the merging parties, which affects the view of the financial stability and the ability to compete.

The agencies will look at the potential divestiture buyer's experience in the specific product market that the spinoff business is in or the spinoff assets are related to, or in a similar market product or a similar geographic market, to determine whether that buyer has the experience and the ability to be able to take what it is getting as a part of the divestiture package and be able to compete it as it would have been competed, as it was being competed by the company that is selling it off.

Again, that goes back to the points that

Alex was making previously about the divestiture of a standalone businesses being typically a divestiture that is going to be a successful remedy, with asset divestitures having mixed results. In the latter case, it may be difficult to identify the assets that are going to be necessary.

Where an agency has an upfront buyer that has already been identified, then the asset package can be more tailored to what that specific divestiture buyer is going to need. If you're thinking in the abstract, maybe they need a distribution network, but maybe the actual divestiture buyer doesn't need the distribution network, it has its own distribution network. So that would be an overly broad remedy to put in place.

It doesn't necessarily need to be a current competitor in the market or an adjacent market. Financial buyers that have industry experience, that have individuals working with them that have experience in that industry, can be very successful divestiture buyers as well. So it's holistically looking at the potential buyer to see whether they have the characteristics, the experience, that is going to be necessary for them to - in the agency's view - hit the ground running, not require a huge ramp-up, be able to put the assets into play or the business into play before it starts to deteriorate.

I think it's again important, as Alex said, to make sure, particularly if you are looking at an existing competitor, a strategic buyer, to not be creating competitive concerns through the divestiture that would not exist if you were looking at a divestiture buyer that is not already a part of the market. So that's something the agencies will look at.

But it's really a question of assessing the divestiture buyer's ability and incentives to be able to compete. That may be informed by the price at which they are getting the divestiture package. Is the price so low that they wouldn't necessarily have to compete quite as aggressively or in the same way? Is there an incentive to liquidate the assets going down the road? All of these are things that are going to be considered because the agency wants to make certain that that divestiture buyer is going to stay in the market and be successful.

MR. WEISKOPF: Thank you.

Mark, is it problematic if the buyer acquires ongoing support from the seller?

MR. ISRAEL: It can be. I think Aditi referenced this right up-front, about this intermediate case where there has to be some ongoing oversight. Obviously, there is a potential concern — and it happens a lot — when as part of the divestiture package there will be some sort of sales support or training or there is some ramp-up period. That's often how things are structured, that there will be some sort of eighteen- or twenty-four-month ramp-up period until the new divestiture buyer can be fully on-the-ground running that they require ongoing support from the seller. Obviously, if they are competing in the same market, that creates some room for mischief.

I think what it does really is just mean, as I said earlier, that this distinction between structural and behavioral all gets blurry — and Aditi said this too — and there is this behavioral piece to the structural remedy.

Ultimately I would evaluate it the same way as I did before. If what you're saying is you are going to set up a divestiture buyer but that divestiture buyer is going to need an intense amount of support across large aspects of what it does because it's really new to the business, then maybe that's not going to work. If it's something where you can have more of a well-defined kind of benchmark that they are able to do *X*, *Y* and *Z* and you need to provide them support just in one additional thing, you can define the parameters of that and make sure that they're hitting certain targets as far as what costs they are able to obtain and things, then maybe it's something that could work.

But I think we almost certainly have to recognize that that's going to require at least some period of ongoing regulatory oversight because there would otherwise be at least a potential incentive to harm competition.

MR. WEISKOPF: Thank you.

Aditi, let's think about a merger of two retailers. What sort of impediments might a divestiture buyer face in trying to be an effective competitor in that sort of setting?

MS. MEHTA: I think if you're looking at this type of merger you would do what we do when we're evaluating any potential remedies: Think about the full set of assets that the buyer needs. As part of that process you speak to potential buyers of the divested asset, other industry participants, look at business plans.

For a retailer there may be other things, like distribution assets, that are important to the retailer that they may not already have. If it's a merger of retailers, the purchaser of the divested asset has to be someone who is not going to create their own anticompetitive issue, as has been mentioned. But that may mean that they're not very large and they don't have the distribution assets that they need to run a larger retail facility. So that may be one thing that would need to be added to the set of divestiture assets to make an effective competitor.

There are more generally other things that can be included in the set of divested assets, like personnel or sales and marketing capabilities, supply contracts, service contracts.

MR. WEISKOPF: Great. Thank you.

Let's consider a different setting. Let's say two intermediate manufactured good suppliers. Alex, in that sort of situation or industry setup, what sort of impediments might a divestiture buyer face?

MR. OKULIAR: Without repeating some of the factors that we've already discussed.

Specifically with respect to intermediate manufactured goods suppliers, they're going to be thinking about things like: first of all, is it a line-of-business sale or is it just an asset sale; if it's just an asset sale, do we have all the requisite assets in order to compete?

The concerns also depend in part on whether they are a non-industry buyer or an industry buyer. They may be able as an industry buyer to pick up a few assets and be able to compete right out of the gate.

Another thing is: during the interim period is there a degradation of the assets that are being held by the divestment party, and was there a failure by that party to maintain those assets during the hold-separate period and the period pre-final order?

Was there a loss of key personnel? That's another huge issue. Are the best people leaving the business being divested or are the best people leaving, say, the manufacturing facility that's coming over to you? That is particularly an issue if you're a non-industry buyer because it is going to be harder for you to replace those folks; you just don't have the network and the contacts to be able to replace people as easily or quickly.

Sharing of confidential information with the divestment party. If the divestment party knows all your costs and knows everything about your manufacturing facility and they're still going to be in the general area competing with you or potentially competing with you, that's going to be a big issue. So you're going to want to be looking out for that.

I think probably the biggest issue for folks in intermediate manufactured goods is: are they able to maintain their customer and supplier relationships? That's particularly key if you're a non-industry buyer. There are oftentimes change-of-control provisions. Customers or suppliers might try to renegotiate terms with you; they might try to negotiate more favorable deals for themselves just to keep you in business. So that is another big issue that is I think fairly specific to this particular scenario.

MR. WEISKOPF: Great. Thank you.

Before we open it up for any audience comments or questions, panelists, any final thoughts or comments?

MS. PFAFFENROTH: I would just say — and this piggybacks on everything that Aditi and Alex were just saying about what all the concerns may be in those specific sectors to determine what's going to make for an effective remedy — you can have the perfect divestiture package that has everything in it, that has everything in it that would alleviate the competitive overlaps, that should set up a standalone competitor. If you don't have the right divestiture buyer, that package isn't going to be enough.

So it is both identifying everything that a buyer is going to need — and if you know who the buyer is, that helps you tailor it to that specific buyer to ensure success — but it really is a question of if you put the package together, is there another company, is there a financial buyer, that is going to be able to take that package and be able to sustain competition in the market with it?

MR. WEISKOPF: Thank you.

Questions, comments?

QUESTION [Cecile Wong]: Hi.

Alex, when you were talking about how there are certain countries in the world that use other issues than competition in their assessment you left out the United States, where some mergers get reviewed by the FCC and they also have a public-interest standard.

MR. OKULIAR: Right.

QUESTIONER [Ms. Wong]: One of the things that Sprint and T-Mobile are going to come in with is this notion that if allowed to merge they would be able to deploy 5G faster. I'm trying to figure out how smarter people in the antitrust world assess that claim and if there's anything you can say about it.

Are there divestitures that could fix the problem? We saw that four to three got rejected by the Department of Justice just a couple of years ago.

MR. OKULIAR: I'm not sure how much I can say about that specific deal. But I would say that in terms of whether they're able to bring 5G onto the market more quickly, that is certainly I would think — and I'll turn to Mark for this — that's certainly something that could be creditable as a potential efficiency or a gain for consumer welfare that would be taken into account, and it's something that would not necessarily be considered a public-interest factor that the FCC would look at. That's how I would come at it and that's what I would be thinking about.

In terms of divestitures, I really don't know. Certainly in these types of deals you will see divestitures of bandwidth, of spectrum, that go along with these deals to help facilitate competition in the market and replace the lost competition.

Anything else, Mark?

MR. ISRAEL: I'll try to refrain from commenting too much on that deal.

I agree there is this interesting question of other things that come to FCC. I think the 5G question would be evaluated as a real competition merger efficiency. I do think it is potentially a good example of where divestitures of spectrum would have to be considered relative to the effect they had on the ability to do that.

But I do think generally there is this issue at FCC. In that same deal I think there are filings at FCC about the effect on jobs and things.

QUESTIONER [Ms. Wong]: Right, absolutely.

MR. ISRAEL: Obviously it's a hot topic to what extent that interacts with antitrust and things.

I think generally the agencies don't think as much about those issues. I think the DOJ and FCC, in particular in my experience on other deals, have worked together pretty well to craft a unified remedy, and things like the effects on jobs or broader initiatives about the effect on independent voices or communications or things that the FCC takes into consideration are largely independent, I think, of what the DOJ thinks about. I don’t think they get as evaluated as much. There are cases in which they cause some tension with competition approach.

But as far as your specific one about 5G, I agree with Alex, I think that probably should be evaluated. If it happened, it would lead to higher-quality mobile wireless networks and I imagine the DOJ would think hard about that.

MR. WEISKOPF: Thank you. That’s a good question.

Another question?

QUESTION [Shirley Quo]: This is directed to Mark. Did I hear you correctly that you said that antitrust agencies are not regulators?

MR. ISRAEL: I would draw a distinction between antitrust and regulation. Some of this may be how we define the words. My definition would be that regulation is ongoing oversight by an agency in constraining the behavior of those in an industry, whereas you could say antitrust is a very specific form of regulation, but I like to think of it as almost the opposite, that the role is to maintain market structures in a way that the market self-regulates through competition.

MS. MEHTA: That’s how we view it as well.

MR. WEISKOPF: Other questions, comments?

QUESTION: Would any of the members of the panel please elaborate a little bit more about the Chinese walls as remedies? I work for the Spanish Competition Authority and we have a lot of trouble making Chinese walls actually work. Sometimes I have the feeling that they are kind of away from our countries because we are not really sure how to make them work.

MR. ISRAEL: This seems like a better question for the lawyers.

MR. OKULIAR: I can say simply from experience when I was at DOJ that we imposed firewalls in a couple of our consents when I was there and had oversight, we had someone at the agency who served as a monitor, and they appear to have worked.

I think one of the difficulties with firewalls is that ultimately they are kind of hard for the agency to enforce. They are sort of self-enforced, so if there is information exchanged it would be very difficult for the agency to pick up on that, unless there is an immediate effect in the marketplace or if there is something in the documentation, so if the parties share documentation and the agency monitor sees that of course. But that is a fairly unlikely scenario.

MS. PFAFFENROTH: Yes, and I think it goes to the overall enforceability and ongoing monitoring that's required by different types of behavioral remedies. But for the firewalls in particular you will see consent decree provisions that impose a firewall and also compliance programs to monitor and make sure that they are being enforced.

Is there a possibility that companies will disregard the law and be in violation of the decree? Certainly it is a possibility. But I think in practical effect you assume and hope that companies that are committing to that type of decree, which is enforceable in a court, are putting in place the structures and the safeguards necessary to make sure that the information flow is being constrained in the way that it is intended to be.

MR. ISRAEL: I guess I will say one thing. I think this goes to the discussion about arbitration. Probably for both behavioral structural remedies none of them work perfectly. Sometimes I think the debate will become somebody proposes a remedy — especially if it’s like an FCC process where there is public debate or litigation, a remedy is proposed, and then the response is kind of “Here’s all the limitations of that remedy, and those are true.”

That’s why I said at the beginning I think you’re thinking about these things mostly in deals that are kind of close calls and where you see a lot of benefits and you’re just saying, “We hope that the firewall makes it harder for that behavior that we’re worried about” or “We hope that the arbitration pushes things in one direction.”

To me the only way to think about these things is that they somewhat reduce the risk of things we’re concerned about such that the balance tips in favor of the efficiencies. I think if our standard when we debate them becomes “Do they work entirely as anticipated?” we probably would end up rejecting all of them.

MR. WEISKOPF: Ben?

QUESTION [Benjamin Wagner]: How do the agencies think about ownership when they’re thinking about divestitures? I’m thinking about situations where there are franchises, like if Domino’s and Pizza Hut merged or something and there was an overlap that the same franchisee owned. For those two locations where there was overlap did those not require divestiture? How do the agencies tend to think about those kinds of things?

MR. OKULIAR: I’ve been involved in one deal where there were franchisees and they were treated as being part of the company. They were associated with the company. Where there was an overlap of franchisees, that was considered something that might need to be divested.

MS. MEHTA: It probably depends on how independently they behave in how pricing works and things like that.

MR. WEISKOPF: Thank you, panelists, for a lively and insightful discussion.

We’ll have a short break and then we’re going to pick back up with the second panel on Merger Retrospectives at 11 o’clock.

[Break: 10:48-11:00 a.m.]