FEDERAL TRADE COMMISSION

COMPETITION AND CONSUMER PROTECTION
IN THE 21ST CENTURY

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George Mason University
Antonin Scalia Law School
3301 Fairfax Drive
Arlington, Virginia

FEDERAL TRADE COMMISSION

I N D E X

P R O C E E D I N G S

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INTRODUCTION AND WELCOMING REMARKS

MR. MOORE: Good morning. Welcome to day three of our hearing sessions on antitrust and multi-sided platforms. We have a great and full day for all of you in the audience and watching on the web.

Just to put today's events in a little bit of context, on Monday, the first day, we heard quite a bit about the economics of multi-sided platforms, and we also heard about individuals' experiences operating multi-sided platforms and investing in multi-sided platforms in the business world. And we also heard about how to define relevant markets and think about market power from an antitrust perspective.

Yesterday, we heard about the United States vs. Microsoft case, a protoplatform case. That case was litigated and decided before much of the new economic learning on multi-sided platforms had taken place. And we also heard about how the U.S. and European competition agencies might treat cases involving multi-sided platforms differently.

Today is all about conduct, and when I say "conduct," I'm using the term quite broadly. I'm thinking both about anticompetitive conduct by a single

firm and also about mergers and acquisitions. So in the morning sessions, we have two panels on potential exclusionary conduct cases involving multi-sided platforms as defendants.

The first panel, which will take place in just a few moments, is going to focus on specific pieces of potential anticompetitive conduct. The second panel is going to focus on how vertically integrated platforms might be able to engage in potential exclusionary conduct.

We have three afternoon sessions devoted to the timely topic of how to think about mergers and acquisitions involving multi-sided platforms, particularly when the acquiring company is a large and established multi-sided platform.

So with a broad overview of where we're going today and how that fits into what we've done so far, I will turn the mic over to my colleague, Ian Conner, who is going to moderate our first panel.

PANEL 1: UNDERSTANDING EXCLUSIONARY CONDUCT IN CASES INVOLVING MULTI-SIDED PLATFORMS: PREDATORY PRICING, VERTICAL RESTRAINTS, AND MFN

MR. CONNER: Thank you.

So good morning. So this is the first panel. It is Understanding Exclusionary Conduct in Cases Involving Multi-Sided Platforms: Predatory Pricing, Vertical Restraints, and MFN.

So I will do a very quick introduction of the esteemed panelists.

To my right, first, at the end of the table is Dick Schmalensee, who is the Howard Johnson Professor of Management Emeritus, Professor of Economics Emeritus, and Dean Emeritus of MIT's Sloan School of Management.

Judith Chevalier is the William S. Beinecke Professor of Economics and Finance at the Yale School of Management.

Tom Brown is a partner in the antitrust and competition and the global banking and payment systems practice at Paul Hastings in San Francisco.

Susan Athey is the Economics of Technology Professor at Stanford Graduate School of Business.

And, finally, Pinar Akman is the Director of the Center for Business, Law, and Practice, and a

Professor of Law, specializing in competition law at the University of Leeds in the United Kingdom.

We will start with opening statements from each of the panelists and then turn to questions. So I will turn first to Dick Schmalensee for his opening statement.

MR. SCHMALENSEE: Thank you. Let me just make a few general remarks.

First, I think it's important to be clear what we're talking about. The definition of "platforms" is sometimes a little vague. I really mean a business that facilitates interactions between members of two distinct groups, and when that's a viable business, there are inevitably indirect network effects, network externalities, connecting the members of those two groups. If you can make a business out of facilitating interactions, they must care about the folks in the other group. That's indirect network effects.

When multi-sidedness is present, it is hard to imagine, in antitrust analysis, why it wouldn't be considered -- perhaps not modeled explicitly, perhaps put to one side -- but if it's an important feature that affects business conduct, like scale economies or intellectual property, it's hard to make a case for ignoring it. And I take this to be the primary lesson,

perhaps the most durable lesson from the AmEx decision.

The need to consider two-sidedness I think is particularly clear in predatory pricing, and that's what I'm going to focus on. Platforms often sell to one group at a loss and make their money on the other side. Those are denoted as the subsidy side and the money side in the vernacular.

Newspapers are a classic example, and I'm going to ask you to cast your minds back to a world in which newspapers were profitable and important. Typically, the papers themselves were sold at or below marginal cost, and the money is made on advertising.

Now, in fact, I get a couple of neighborhood weeklies for free every week. Now, to say that that pricing of newspapers below cost is always predatory and to ignore the advertising side would be crazy, but similarly, to say that any price for advertising above cost is nonpredatory would also be a little bit crazy. It's possible to price advertising in this world above cost and still have predatory effect by making it impossible for other newspapers to earn a living.

People talk in this context about the Times-Picayune case, but people often forget that there were two charges initially in Times-Picayune. One of them was a predatory pricing charge. Times-Picayune

operated a morning newspaper and an evening newspaper. The charge was the evening newspaper was operated below cost, thereby making it impossible for another evening newspaper to compete.

A district court looked closely at that looking at the whole newspaper, not at how newspapers were priced or how advertising was priced, and said, "That paper's profitable. Good-bye." That allegation did not reach the Supreme Court.

Let me make two other general comments if I haven't run over my time. A central feature of two-sided platforms is they need both groups to survive, so cutting off access to either one, even if it is the subsidy side, suffices to bar entry. So in considering whether a deterrent strategy can work, you don't have to block both sides. Blocking one will do the trick.

The second thing is in rule of reason cases, there's always the fundamental issue of whether there's a significant impact on competition, and that really does require looking at something like a market, and I'm sure we'll come back to market definition questions, but since we're probably not going to be able to avoid AmEx, that's the part I like least about the dissent.

The dissent almost seemed to say you suppressed competition, that's illegal, and I wonder what would have happened if Diner's Club had had the nonsteering rule that American Express had had.

Thank you.

MR. CONNER: So next we will turn to Tom Brown.

MR. BROWN: Thank you, Ian, and thank you, Dick, for the introduction to this wonderful topic, and I actually want to thank the FTC and my former colleague, Bilal Sayyed, for inviting me, having spent the last couple of days sort of reviewing all the amazing content. So I really do want to thank the Commission for pulling all of this together.

So I want to start in a somewhat prosaic fashion since I'm, you know, the practicing lawyer here, not the academic, and to focus on the practice that triggered the Supreme Court's case in Ohio vs. American Express. We tend often, when a case reaches the Supreme Court, to lose sight of, like, the thing that we were thinking about in the first instance, and so I think we should all keep in mind the words of David Byrne and ask sort of -- the noted economist, David Byrne -- how we got here.

So I brought an American Express card just as a prop, because I thought it would be useful for people

to have, like, visual -- because this is something we do all the time, but we don't necessarily think about it. So the precise practice at issue -- and I'm not making this up, like this is what the case is actually about, okay -- so the restraint at issue in Ohio vs. American Express was that when a merchant has decided that they're willing to accept American Express cards, and so they have a little decal on the door, and the consumer goes into the store and then takes out their American Express card, that the merchant at that point is disabled, as a matter of contract, from encouraging the consumer to use another form of payment.

Do we all have that in our heads? I can do a replay, okay, just in case you missed it. So I'm in a store, I have stuff I want to buy, I take out my American Express card, and at that point, the merchant is disabled from persuading me to use another form of payment. That's what that case is about.

The precise legal issue that's teed up -- and there are all kinds of things to talk about in the opinions themselves. One -- and I think it would have actually been nice, in sort of rereading the opinion, had Justice Scalia been on the Court, because I would have hoped that the case would have been slightly clearer -- but the key legal issue is actually buried

in a footnote, footnote 7 of the opinion, because the Department of Justice claimed that it could make out a case challenging that restraint that we've discussed and that I've described by pointing to the restraint, plus the fact that American Express charged higher prices for its services than its competitors, right? So you have a restraint, plus higher prices, and according to the Department of Justice, that's all they need to show in order to shift the burden to the defendant to justify the conduct.

The Supreme Court then holds, no, that's not enough. If you're going to point to those prices as direct evidence that the contractual provision that you've identified has harmed competition, you actually have to define the market and grapple with the conduct in a coherent way to link the alleged restraint to the higher prices, right? Otherwise, we just have this sort of weird correlation, no real causation, and that's not enough. That's the case.

So the claim that the case represents some dramatic change in the trajectory of antitrust law seems, on the facts, like the only word that comes to mind -- well, I guess there are two. The polite way of putting it would be hyperbolic. The less polite way would be that's crazy, like -- and you can put whatever

expletive you want in front of crazy, right? Like I have all kinds that I put in my head, and I'll just omit them in polite conversation, but, like, that's nuts.

And to demonstrate the nuttiness of it, let's recall another super famous two-sided market case, also involving the Department of Justice, also involving a loss in the Supreme Court, and I don't mean Times-Picayune, right? My famous two-sided market case, for what it's worth, is U.S. vs. Chicago Board of Trade. When I teach two-sided markets in antitrust law, I always start with Chicago Board of Trade, right?

And let's then go back and think about Chicago Board of Trade for a second. So the Department of Justice case in Chicago Board of Trade consisted of a set of rules that restricted how traders on the floor could trade grain that was going to arrive at the end of the closing session, and the joint venture adopted a rule that said if the grain was arriving after 2:00, you couldn't purchase it at a price other than the price at the end of the closing session. That bothered some traders and some railroad owners, I think, I think that's the sort of subtext of that particular case, and so then the Department of Justice sued.

Justice Brandeis said, like, that's not enough

to establish that some provision has inhibited competition within the meaning of Section 1 of the Sherman Act. You have to actually dig in and evaluate the underlying facts. So, again, I commend the Commission for putting all of this together, and I hope that we can reduce some of the sort of hyperbolic claims about where antitrust law has gone.

Again, right, so I did see David Byrne at a music festival this week, so, like, he's kind of on my mind, right? Like, antitrust is not actually a road to nowhere, but to know where we are, it is helpful to know where we've been.

MR. CONNER: Susan?

MS. ATHEY: Thank you.

So I think as Dick pointed out, you know, a key feature of platform markets is that they're characterized by scale economies and particularly the chicken and egg problem, and so, you know, if you want to get started as an entrant in a platform market, you need sellers to get buyers and buyers to get sellers.

And so a common way that, you know, I teach my MBAs about what you would need to do if you wanted to enter one of these businesses is to find some kind of a business deal that allows you to acquire a set of either consumers or sellers and then use those to pull

the other side on board; or another option is a large intermediary that might be able to steer a group of buyers or sellers to become sort of the anchor tenants of your platform.

So an entrant can raise capital, sort of subsidize an initial set of parties to participate, and then pull the other side in, and this is very common, and it's been, you know, used across all the marketplaces that we know and love to get started.

Of course, incumbents recognize that as being the key path to entry, and so they also realize, then, if they can stop entrants from acquiring a big set of consumers or sellers through business deals, then they may be able to really impede entry.

Another thing that they can do is to avoid letting the entrant kind of easily siphon off a customer. So if customers might multihome, like switch back and forth between platforms, another kind of strategy an incumbent can follow is to make it difficult for, say, the sell side of the market to multihome.

So let me give some hypothetical examples of conduct that would sort of go into these types of buckets so we could think about what might have some consumer welfare challenges. So I'm going to

intentionally use some examples that are not happening, so, please, nobody tweet that I said these specific examples are happening, okay?

I'm going to use firm examples that I'm not aware are doing this just to sort of get us thinking about, you know, how we would interpret that conduct. So these things have happened but just not by these specific firms or in these industries.

So a first example would be suppose that Amazon told booksellers that they were not allowed to use software that helped them figure out whether the best place to sell their particular book is on eBay or Amazon, okay? So suppose Amazons said, if you want to use that kind of software, you have to communicate with us by uploading CSV files. You can't actually plug into our software and change your prices in real time. What would we think about that? We might think that that might somehow be bad for competition between Amazon and eBay.

Suppose that Amazon owned the software that booksellers used to try to decide where to sell their books, whether on Amazon or eBay or other platforms, but they didn't actually give exactly accurate information about where to sell, and, in fact, they suggested that sellers sell on Amazon when they might

get a better price on eBay. That also might concern us from a competition standpoint.

Another type of hypothetical example, suppose there was a car review website that had blogs and information about, you know, where to buy stuff on cars, and Amazon said to that car review website, well, if you want to put an affiliate link in the part where you talk about books, so if you want to make money on your car review website by linking to Amazon and getting a commission for referring book customers, well, you also have to use Amazon affiliate links on the page that sells auto parts. So you can't actually put an affiliate link for an auto part website over there. Again, we might think that would make it hard for an auto part e-commerce site to enter because they would have a hard time acquiring customers if they didn't also sell books, and so it would sort of make it hard for them to acquire a big group of customers by making a deal for affiliates from the popular blog website.

And as a final hypothetical, suppose that AT&T, having now entered the advertising business, decided to charge higher prices to Amazon if they showed ads through DirecTV, and Amazon couldn't advertise its books or its Prime delivery for the same price as other

advertisers through DirecTV.

So I think all of these would at least cause us to stop and question, you know, whether those types of practices had efficiency benefits, as well as whether they might cause some harm to competition, and you might be really the most worried about long-term harm for competition, those cases that might make it hard to have real platform competition that really incentivised the platforms to behave well.

So all of those examples were actually motivated by work that I did when I spent a lot of time working in another industry, which was internet search, and those types of practices were really common, and sort of maybe perhaps surprisingly, they really were not mostly stopped even by all the various litigation that you've seen around the world.

So just to think about how this customer acquisition works in search, most of us think about ourselves as sort of choosing an internet search engine as an individual consumer without realizing that, you know, maybe up to 30, 40, even at times 50 percent of the market, the consumer searches are actually steered through various types of business deals.

Just as an example, you know, Google pays Apple billions of dollars a year to be the default search

engine on the iPhone. I read a recent news report -- I don't know if it's true -- that that was 9 billion in a recent year. So these types of business deals are used, and they are used for, you know, being the default engine on browsers, and they used to be used for PCs and phones and various other types of mechanisms for acquiring consumers. And, indeed, you know, Google got its start through a series of these deals.

Just as an example of how one of those worked, when Bing first entered the search market -- well, it wasn't called Bing then. When Microsoft did, Microsoft and Google competed to be the default search engine on AOL, and actually Google ended up paying more than 100 percent of the search revenue from advertising to AOL in order to make sure that that ten points of market share stayed with Google rather than went over to Microsoft's search engine.

And so those types of business deals are actually really important behind the scenes, and so what types of conduct that you might worry about in those cases are making the exclusive deals go across countries, across all different types of searches, across all different websites operated by the same company, and those things might make it difficult for

new entrants to come and get a toehold.

So, broadly, I think that we want to think about exclusive conduct in these types of markets, especially in environments where it's really important to be able to acquire, say, consumers in order to really get a platform going and have later platform competition.

MR. CONNER: Okay. With that, I'll turn it over to Judy.

MS. CHEVALIER: Okay, thanks.

So I think I'm going to start maybe behind where everybody else started and try to give what I think is the kind of list of things we might actually worry -- like, the categories of things we might worry about as anticompetitive potential issues in platform markets, and then talk a little bit about practices that might create them, all right?

So what are we worried about? So, number one, I think we're worried about -- when we say exclusionary conduct, what kind of conduct are we worried about? So I think number one is some situation in which we can make a case that a multi-sided platform effectively shuts down competition outside the platform, and that would be either from a rival platform, which Susan focused a little more on that, or from individual

platform members themselves, right? So participants on the platform's outside competition. So that might be one set of things we worry about.

The second set of things we might worry about is a situation in which a vertically integrated platform provider creates conditions that grossly favor its own product over the other products on the platform, okay? That would be a situation that we might, again, in principle possibly worry about.

The third, I think -- and I think this is the lens through which some people view the AmEx case -- is a platform creates negative externalities for consumers not using the platform.

And then the fourth, which is probably a little aside from our topic today but I will add it for completeness, is a situation in which the platform functions to facilitate collusion among the platform participants. So when I think of a complaint against a multi-sided platform, I typically want to think about which, if any, of those four buckets that I just described is it implicating.

Now, I think one of the challenges in looking at this -- and I agree with Dick's opening statement that this is -- that all of these cases are just fact-specific, which makes it hard to derive too many

general principles, I agree with him, and in particular I want to talk about what I think is a false dichotomy that sometimes arises in looking at these contractual practices.

So are there situations in which the contractual practices can substantially contribute to the four problems I just identified? Yes, I think so. Is it also true that those same practices may have fairly compelling efficiency rationales for being adopted? Yes. So I think there -- that the same practice can be both having a fairly compelling efficiency rationale and a fairly compelling theory of harm from an anticompetitive perspective, and we often try to think of those things as mutually exclusive, and they're really not.

So I'll give an example of maybe two situations where you might think there's both an efficiency rationale and a theory of harm. One is hypothetical. One, I think, is real. So obviously I think Pinar is going to talk about some cases in Europe around travel MFNs, and there we're thinking about the situation in which a online travel service provider is entering into contractual relationships with the hotels that book through the site with regard to how much the hotel -- how the hotels can price and offer availability outside

the site and, therefore, you know, typically restrain the extent to which the hotels offer cheaper prices on their own sites, for example, or on rival sites than, on the travel booking site.

Now, is there a good efficiency rationale for that? Yes, right? A lot of people will search the travel site, use the facilities provided by the online travel site, free-ride off of it, and then go book on the hotel site itself if there's some better deal from booking on the hotel site. Is it also potentially a source of an anticompetitive practice? You know, I think it is, especially in the circumstance of a very dominant booking site, potentially.

Another one which is hypothetical, but I think, you know, you could think about, is -- so think about Amazon, and I will say I think I am more relaxed about Amazon's market position than many of the people who are watching the webcast, but nonetheless, one thing, a lot of people use these little apps that they attach to Amazon that tells them when there's a cheaper price elsewhere, as they're about to put something in their cart. Now, those apps do create competition between Amazon and other websites.

If Amazon were to enter into a contract with retailers who sell on Amazon or who sell their products

on Amazon, you know, preventing them from offering cheaper prices elsewhere, would there be a substantial free-riding justification for that, given people are using Amazon and the app to find out that there's a cheaper price at some website they didn't even know about? Yes. Is there also the argument that in some dynamic sense that would have the effect of restricting competition? Yes, I think it probably would, right?

So I think when we think about these cases, the trick here -- and I don't think we've been very disciplined about thinking of the rules -- is we need to think about situations in which -- we have to ask the question, how dominant does a firm have to be to have this explanation override or the anticompetitive concerns override an efficiency rationale?

Thanks.

MR. CONNER: Okay, thank you.

And last, but certainly not least, Pinar, and I will turn the clicker over to you in the hopes that you can operate it better than I can.

MS. AKMAN: Thank you. Thank you, and I'm grateful to the FTC for the invitation. It's an honor to be here.

So I would like to continue on the theme of these MFNs, and like Dick, I also take the platform to

mean an intermediary that facilitates a transaction between two parties, and this platform is usually remunerated by a commission. So I'm not looking at platforms that might be funded by advertising, for example.

So in the European Union, in the last two to three years, we have had at least 16 recent investigations that have concerned platform MFNs. There are 28 member states for the moment, until the end of March, so quite a few of the European Union's national competition authorities have looked at these MFNs in different contexts. Most of them have concerned online travel agents, but we've also had the Competition Commission, now the CMA in the UK, look at price comparison websites for insurance, and there's an ongoing case against one of these price comparison websites. There's also been a case against an online auction platform in the UK again.

At the E.U. level, the European Commission itself looked at Amazon's MFNs. Interestingly, these were MFNs in Amazon's contracts with e-book publishers, like the case in Apple, which preceded this, and Amazon had required e-book publishers to agree to these MFNs so that Amazon will not be beaten on price, but part of those clauses also required these book publishers to

inform Amazon of any better clauses elsewhere.

The Bundeskartellamt, the German federal cartel office, also looked at Amazon and actually in a scenario quite close to what Judith described, so the Bundeskartellamt cartel office found that Amazon had MFNs with all the sellers who were selling everything, basically, so it wasn't specific to books, but Amazon had these MFN clauses in the contracts with third-party sellers by which they were promising to Amazon that they will not essentially sell the same product elsewhere more cheaply. Amazon terminated its practice to end the proceedings.

Now, in the E.U., after all these cases, a distinction has been made in relation to these MFNs. So this distinction is between so-called wide MFNs and narrow MFNs. By wide MFNs, the authorities refer to clauses that align prices across all sales channels, so the price on platform A will be the same as on all platforms, as well as the seller's own website, as well as the seller's offline sales channels.

And by narrow MFNs, they refer to clauses seeking parity between the platform and the supplier's online sales only. And this distinction has proved to be quite fundamental because the enforcement practice has really been based on this distinction.

Now, unfortunately, much of the enforcement practice have gone in different ways, so in Europe now, we have a landscape in which one entity in particular, Booking.com, for example, finds itself subject to very different approaches when it comes to the assessment of its contractual clauses with hotels. So some authorities have prohibited all types of MFNs, wide ones and narrow ones. Some of this has been done by enforcement. Some of it has been done by legislation.

And some authorities have prohibited only wide MFNs, but they allowed narrow MFNs. And, again, some of this is through time-limited commitments, so they will come to an end in about five years' time. And some of these have been done through enforcement decisions. So we have a really fragmented legal landscape applying to these clauses in Europe.

So in the rest of the time I have, I'd like to talk a little bit about what about multi-sided markets makes these MFNs different, and it's a lot quicker to explain that on this diagram than to say it in words. So with the regular MFN, you have a seller that promises to a customer that that customer will be treated as well as that seller's other customers. So such an MFN on a regular market, not a multi-sided market, would essentially link the prices between

different customers of the same seller, giving reassurance to the first customer that essentially a competitor of that customer later will not get a better deal, for example, regarding the input price of the product that the seller is providing.

Now, in contrast, with a platform MFN, on a multi-sided market, the MFN clause that you can see in the contract between one platform and a supplier basically links the prices for the same customer, buying the same product, from different outlets, and usually these will be competing platforms. So this is how platform MFNs differ from regular MFNs, and this is also why, in the literature, it's been said that they are closer to price-matching guarantees than regular MFNs, because essentially it's about the price of the same product to the same customer that's being linked at different outlets.

Now, in terms of the theory of harm, as Judith's already mentioned, some of it has to do with collusion between platforms. So when platforms have these MFNs in these clauses, this will soften competition between them because there will be no benefit to any platform from reducing its commission to the seller to give a better price on that product to its customers, because prices will be essentially

matched.

Similarly, this can foreclose other platforms. So a new entrant who would like to enter the platform market will not be able to cut prices to steal customers from the incumbent platform because the MFN will, again, match the price for the incumbent as well.

Because they were sort of more similar to price-matching guarantees, commenters have suggested that these should essentially be treated in the same way as resale price maintenance clauses, but then more recently we see again in the economics literature that there are models which show that actually all types of MFN clauses, including wide MFNs and narrow MFNs, may increase welfare, and they may increase welfare of consumers as well as the surplus of the platforms and the suppliers.

In that model, what's crucial is that the seller in such a scenario has its own direct sales channel as well, but I won't go into the details of that. So the economics of it hasn't really been settled in any way.

In terms of what about multi-sided markets make sort of the assessment different, I think several features of these markets make the assessment of these clauses more complicated. The most important one in my

view is the fact that these platforms operate on the basis of an agency model.

So in my research, I would argue that these platforms are legally agents of the suppliers, so from an antitrust point of view, these clauses really fall within the single economic entity doctrine, and that should essentially take these clauses out of the scope of a Sherman Act Section 1 or Article 101 TFE treatment in the E.U.

Why are they agents? Because they never own the product. They never set the price for the product. They don't assume any of the financial risk arising out of the contract between the platform and the third parties, which is the crucial factor at least in the E.U. when we look at agency, so -- and I think that should say something to antitrust enforcers about what sort of theory of harm might be the relevant one here, because these are essentially contracts between a seller and agent of the seller.

And the agency model also further complicates the theory of harm because we've seen in the cases in Europe, it's not always entirely clear whether the restriction we are concerned about here is, for example, the restriction of interbrand competition or whether it's about the restriction of intrabrand

competition.

So the competition between different retailers or -- well, agents in this case selling the product of the same company, and if we look at the Apple case, e-books case in the U.S., for example, we see that the theory of harm there was clearly a horizontal price-fixing conspiracy type theory of harm, whereas in the online travel agent cases in Europe, the clauses are very similar. The theory of harm seemed more like a vertical restraint type theory of harm, rather than a horizontal conspiracy, but there were sort of the -- the decisions sometimes alluded to an effect on the horizontal competition between platforms as well.

So in terms of other specific features of these markets, efficiency arguments, as Judith mentioned, are something to really look into here, and these platforms operate on the basis of commission normally, and if consumers always use the platforms to search and find what they like and go to the supplier's own website to then enter into the transaction, the platform never essentially makes money out of its business.

And also, consumers over time learn that actually this platform is not really a good way of, you know, finding out about anything, because I can always find the same product at a cheaper price on the

supplier's own sales channel. So this argument was called the credibility argument in the UK Competition Commission investigation into the insurance comparison market, and the Competition Commission actually accepted this as a valid efficiency argument, arguing essentially or accepting that the platform business model will eventually collapse if their own channel can always undercut the platform on the price. There's also another efficiency argument which has to do with low-quality, low-cost platforms free-riding on the services of the high-quality, high-cost platforms.

So just to conclude in terms of what antitrust enforcers should be looking for in these markets, I think as, again, Judy mentioned, market power is quite important. Again, in my research, I argue that the European cases would have been a lot better dealt with as potentially abuse of dominance cases rather than agreement cases. In those cases, the clauses were all adopted in markets with four to five platforms, maximum, so they are quite tight oligopoly markets, some of these markets. And another key factor to consider is I think whether to -- to decide whether this platform is a gateway to the consumers or whether the supplier can simply walk away and sell elsewhere.

Well, a final thing to say is that looking at

the case law as well as the sort of developing economics literature on this, the form of the clause, so whether it's a narrow platform parity clause or a wide parity clause doesn't seem to matter, and it really should be about trying to figure out the effects of the clauses on a clearly identified theory of harm in relation to interbrand competition or intrabrand competition or both.

Thank you.

MR. CONNER: Thank you.

So before turning to individual questions, I wanted to give the panel the opportunity to respond to any of the comments that have come out from the other panelists. So, Susan and then Tom.

MS. ATHEY: Yeah. Just to sort of pick up on some of those comments, I think I appreciated all the comments from Judy and Pinar about the price comparison engines, but I think one efficiency part that maybe wasn't fully explored is just the impact of the way a price comparison engine works on competition in the industry.

So some research by Glenn Ellison focused on this, as well as some empirical analysis of what happened on eBay when they made price comparison more transparent. Generally, if a price comparison engine

sort of works better and makes it very clear what the prices are, that really toughens competition among the sellers and can make the sellers lower their prices and lower their margins.

And so, say, like, if eBay forces the sellers to show their shipping costs and makes it sort of more transparent, how to actually compare offers across firms, that really makes the products much more substitutable, reduces search costs, lowers prices, and increases welfare to consumers, and so the -- you know, when -- I know Glenn Ellison called it obfuscation, but generally in the context of a price comparison engine, the participants are going to want to try to find ways to make it harder to search and soften the price competition, because people using a price comparison engine often end up being much more price-sensitive because it's so easy to make those comparisons.

And so I think an efficiency benefit of sort of forcing the sellers to have full transparency is that it reduces search costs, and I think, you know, those benefits can vary by industry. So if there's only three sellers you're comparing among, maybe it's not so hard for the consumer to go to their individual websites and do the comparisons, but if there's lots of different sellers and they're, you know, very

differentiated, and there might be an infrequent purchase, something like that, then the consumer welfare harm of not being able to easily shop and compare could be quite large and could really have a big effect on price competition.

MR. CONNER: Tom, and then Dick.

MR. BROWN: So I think as the only card-carrying lawyer on the panel, I want to -- and I love economists, many of my best friends are economists -- but I want to pull back a little bit and make a legal point, and it's prompted by an observation that Judy made that, I think, comes through some of the other content associated with these -- I think we call them hearings, right? Yes, hearings -- and that's a question about why and what we think the antitrust laws are designed to do.

I think there are sort of two themes that are coming through -- well, a lot of the discussions, some I think more from economists and some I think more from lawyers. So I think -- this is a hypothesis -- I think economists, when they think about antitrust law, think of antitrust law as a tool for optimizing market outcomes. I think lawyers -- and that's, like, maybe natural given the econ pedagogy. I think lawyers, when they think about it, think about antitrust law as a

tool for protecting roughly the process of competition from conduct that borders on industrial sabotage.

And both of these things can be thought of as designed and sort of stemming from a consumer welfare standard, but these are very different regimes. Optimizing a market outcome, either a narrow one or a wide one, is very different than enacting a law to protect -- this is, like, where the Sherman Act came from, useful to know where we were, so we can think about where we're going -- was designed to prevent industrialists from hiring bands of thugs to blow up one another's production facilities.

Debating the merits of MFNs in complicated markets, a lot different than hiring people -- again, I'm not making this up -- to blow up one another's production facilities. And so I think we can like antitrust law for what it's good at and still sort of think that, yeah, maybe not really a regime to finetune market outcomes.

MR. SCHMALENSEE: I like lawyers. Some of my best friends are lawyers. I want to elaborate, I think, a little bit on where I think Tom was going, and it relates to one of Judy's buckets, and that's the issue of creating externalities.

So if I understand it correctly in the AmEx

context, the argument is you accept the American Express card. That raises your costs. You spread those costs over all your customers, even those who don't carry and don't use the card, and that issue has or that process and whether it's good or bad has been debated in a number of settings, in a number of contexts.

We regulate debit card fees in this country, for instance. We don't regulate credit card fees. It's hard for me to see that as an antitrust concern. It's a legitimate subject for debate. It's a legitimate subject for concern. But if you take Tom's point of view that the antitrust laws are about competition, I don't think it falls there.

I think there may be some reason why you look askance at credit cards, at payment cards, as a lot of people do, but I don't think it's an antitrust offense. That's how that market works. You don't like it, there are ways to fix it, but bringing a monopolization suit doesn't strike me as the way to do it.

Just a quick comment on Susan's point about price comparisons. I'm reminded of the many business-to-business exchanges that were set up in the dot-com boom and all the press that said these are going to make price comparisons easy. It's going to

make shopping for businesses looking to acquire nuts, bolts, whatever, much easier and much more transparent. They almost all failed, and all that transparency and reduction in transaction costs didn't occur because sellers didn't like price transparency, thank you very much, and they didn't sign up. So thinking about what's good and what's bad in these complex markets is not altogether straightforward.

And one other comment, Susan listed a whole bunch of practices, and I would only say that how concerned you are about them would depend on who does them and in what market setting. She used Amazon in a number of examples, and, of course, firms with a lot of market power get a close look. If the neighborhood online mall does them, maybe not so much. So I think context is really critical in these settings, as in all antitrust settings.

MR. CONNER: So unless there's any other comments, I'll turn to the first question, and this will be for Susan. This is on predation, and the concept of predatory conduct is not limited to simply pricing conduct. Many have argued that nonprice predation, including predatory innovation, should be actionable under the antitrust laws.

How should we think about nonprice predation in

the context of multi-sided platforms? Is there a nonprice conduct that we think might be profit-sacrificing if we look at one side of the multi-sided platform, but is efficient and output-enhancing if we look at both sides?

MS. ATHEY: Sure. So let me just start with one kind of behavior which is -- I spent some time thinking about, which is, you know, sort of vertical manipulation, for example, like when a search engine, you know, promotes one product over another or, like, makes their own shopping site and promotes that over competitors.

And so that was a big issue in Europe, and, you know, there were concerns that Google had done that in some cases, which ended up actually putting out of business a number of, say, European shopping comparison sites or things like that.

And so that -- I think that that's interesting to think about in a platform context, especially when the vertically related firm is itself some kind of a platform and has its own scale economies, because if you steer traffic away from certain types of firms, they actually become lower quality.

So if you steer traffic away from, say, a review comparison site, then there are less consumers

reading reviews, less consumers writing reviews, and actually the content of the site gets worse; or if, you know, if you even steer traffic away from an ad-supported website, they have less users, then they are less attractive to advertisers, and they monetize less well, have less incentive to go out and create more content.

So it's an environment, and when you go to think about predation, you sort of think about a short-term sort of sacrifice for a long-term gain. It's particularly tempting to do that in a market where you know that if you sort of temporarily, you know, steer away consumers from this downstream firm, that they will be permanently sort of damaged. Their quality will be lower, which makes them a less effective competitor in the future, and especially if they are sort of startups, they may, you know, run out of money.

So, you know, I worried about, say, making, say, a temporary sacrifice by, say, looking up a less good shopping engine on the page, which is sort of hurting your -- let's say a search engine's user experience in the short run as a way to, you know, advantage their own shopping site against a competing site, which then ultimately, if that competing site

just gets sort of depressed, it's not as good, then in the long run, it's actually not a sacrifice anymore, because now the competing site is not as good quality.

So the consumers don't mind if it's at the bottom of the page because it actually isn't any good anymore, and you don't actually suffer any kind of long-term harm from that manipulation. So I worried about that from an efficiency perspective, because it, first of all, could -- if you think that these businesses are very innovative, then, you know, there's no reason to think that a monopoly firm is going to continue to innovate the same way that a startup would when it was trying to acquire customers.

And there's also actually just, like, broader implications, like if there's no e-commerce firms in Europe, that might be, like, bad for Europe, and they might -- you know, a lot of times you see people work in one firm and then go off and spin off another firm, and if those firms never get started and never develop those capabilities, it might actually have sort of broader implications as well. Of course, that's outside of antitrust considerations directly.

So I think that we have to watch carefully in markets that have these sorts of scale economies, because it can actually be pretty easy and really not

that costly to really damage downstream competitors.

MR. CONNER: Thank you.

And, Dick, a related question. Is there nonprice conduct that may seem exclusionary if you look at only one side, but may be efficiency-enhancing if you look at the whole platform?

MR. SCHMALENSEE: Well, as a logical matter, there almost certainly are such examples. I wish I had some good snappy ones, but I spent some years on the board of a securities exchange, an options exchange, and options exchanges are platforms that bring together -- particularly that one as it was set up -- bring together liquidity providers and liquidity takers, and we spent every board meeting discussing rules, typically nonprice rules, that limited what liquidity providers could do, how brokers could behave.

Were some of those exclusionary? Probably if you looked at them through the wrong lens, they might be. Our objective obviously was to make our enterprise more attractive to both sides, and so occasionally you had to restrict behavior and even membership on the one side in order to make sure the other side found the market attractive.

And you can imagine nonprice restrictions on, say, Uber drivers that might limit participation of one

kind or another. I know a retired fellow who drives for Uber, and he loves to drive his friends, so he lurks in his neighborhood and waits until somebody wants a right and, bingo, he's there.

Now, if I'm Uber, I might not like to have that behavior. I might like to exclude him, because it is kind of strange, but, you know, I might want to do that just because I'd like my drivers to actually go to where the demand is rather than lurk. I would exclude him. Is that a bad thing? Probably not.

So I think the general principle from Susan's examples and my nonexamples is that you really want to -- in a two-sided context, you really want to look at the implications of rules of any kind on both sides and for the enterprise as a whole, because rules may look exclusionary on one side but be for the benefit of the enterprise as a whole, or they may be profit-sacrificing but output-enhancing if you look at the whole thing. So I mean, it really is important to look at both sides.

MR. BROWN: So I think I may have an example, and this was not planned, but, like, this card is kind of, like, an example. So this is a collector's item. It's a Bank of America-issued American Express card.

MR. SCHMALENSEE: Wow.

MR. BROWN: Yes. And the reason this card exists is because of a prior Department of Justice lawsuit against Visa and Mastercard. And so Visa and Mastercard were sued by the Department of Justice for adopting rules that said that if you were a participant in Visa, you couldn't issue American Express cards. This is sometimes called the 2.10(e) litigation or U.S. vs. Visa and Mastercard. And the claim was that the existence of that bylaw inhibited American Express, was exclusionary on the issuing side. The defense was that it enabled the joint venture to cohere and actually enabled the joint venture to better balance the interests of merchants on the one hand with consumers on the other hand, because it effectively enabled the networks to reduce the amount of revenue that they had to provide issuers to essentially get their loyalty. You could get a complete volume commitment rather than at the level of a particular card portfolio.

So that case was litigated. Dick played a role. And, again, in that case the Department of Justice refused to look at the implications of the practice on both sides of the market, right? This was the sort of first two-sided market case involving the payment card networks, and we were unable to persuade the Second Circuit that, in fact, the market -- that in

evaluating the constraint, you needed to look at both sides.

The rule went away. Banks began issuing American Express cards and, not surprisingly and consistent with the claims that both the card networks had made in the litigation, you saw more price competition at the portfolio level, and merchant discount rates and interchange went up.

MS. ATHEY: So just to maybe give another example that might be -- you could imagine somebody having different opinions about would be something like thermostats. So you might have thermostat companies make thermostats and charging a price greater than marginal cost. You could imagine a firm coming in and deciding their business model is actually to acquire consumers for an Internet of Things platform and view the thermostat as a customer acquisition device and, you know, subsidize the cost of the thermostat in order to induce the consumer to start using apps or a platform more broadly, or they might have a broader value for the data. They might think more consumers and then they'll get more apps and monetize later.

And it is pretty common, I think, for platforms to think about, say, a device as a consumer acquisition device from -- a consumer acquisition vehicle in order

to monetize then later, and so that would be very sad for you if you were a stand-alone thermostat company, but in general, these changing business models -- you know, the industry might evolve so that, you know, vertical integration or -- becomes important or at least thermostat companies need to somehow receive some subsidy from a platform in order to be competitive, given that the consumer is now getting brought onto a platform, and that's part of the benefit of having the consumer adopt the good.

I also want to pick up on something that Dick said that I think is super important. When platforms often have to make a fair number of rules in order to make the platforms function efficiently, and sometimes those rules trade off the different sides of the market but in a way that is output-enhancing. So just some examples, like, you would -- eBay could reward sellers and rank them more highly if they have high star ratings and they ship faster, and that's a really important thing for eBay to be able to do.

And, you know, a seller in Alaska might feel, you know, discriminated against because they can't ship as fast as other sellers, and that might be sad for the seller in Alaska, but it's important for the platform as a whole to be able to provide fast shipping;

otherwise, consumers will leave the platform and go elsewhere.

And so a bunch of things, you know, making sure that Uber drivers drive safely, that they keep their cars clean, that they don't turn down too many rides that are suggested to them; you know, making sure that Airbnb hosts keep their calendars up to date and don't reject bookings; all of these things are very important.

I just had -- I tried to book a ski condo this weekend, and then the seller cancelled on me after I had already booked my flights, and I was really disappointed. I want the platform, you know, to demote that seller because that was a bad experience. It makes me want to just go book a hotel where they are not going to cancel on me.

So, you know, there are -- and there's a whole host of practices, and I think as the platforms mature, and especially if they're more competitive on the consumer side, they do tend to squeeze the sellers, and, you know, Amazon squeezes its sellers, and, you know, historically Walmart squeezed its sellers, and that is tough for the sellers.

But at some level, like, economic efficiency wants the sellers to be, you know, forced to be pretty

competitive, to provide high quality, low costs, low margin. That's what expands output. And at some level the platform is acting on behalf of the consumer to force them to provide that, and you don't want to get in the way of them.

MR. CONNER: So before turning to the next question, I did want to let everyone know in the audience that FTC staff is walking around with question cards. So if you do have a question, just hale them and you will be able to put in a question.

So the next question I have is for Judy, and this actually plays off of something that Susan was just talking about. The FTC, in these hearings, has received a number of comments arguing that the success of Amazon's Prime Program, where you pay a flat fee for access, is a tool that Amazon uses to exclude competitors. For instance, Stacey Mitchell from the Institute for Local Self-Reliance writes, "There's evidence that being a Prime member alters consumer behavior. When people pay for Prime, they naturally want to maximize the value in free shipping and they derive it by doing more shopping on Amazon. Studies show that Prime members are significantly less likely to comparison-shop compared to non-Prime customers."

Would an economist analogize Amazon's Prime

Program to a two-part tariff, a pricing scheme that is ubiquitous in many markets, including retail markets -- for instance, in Costco -- and does the multi-sided nature of the Amazon business make the pricing scheme more questionable?

MS. CHEVALIER: Yeah. So I think the answer to that is it is a two-part tariff, and it's hard to see really how the multi-product part really -- I mean, the platform part affects that. I mean, I think -- you know, one thing that's been floating a little bit in some of the conduct that we've been discussing -- and Pinar had this discussion of platform MFNs versus regular MFNs -- and one characteristic of the platform MFNs is that the kind of language -- the contractual language is a contract referencing rivals, right, which is language people sometimes use to think about a category of contracts that we might want to give extra scrutiny to.

I mean, Prime is not that. I mean, I understand that you have to have a certain amount of -- you know, Amazon had to have a certain amount of scale to make Prime attractive, and I also understand that it lowers the marginal cost for the consumer to purchase Amazon products, but I think unless you're going to entirely abandon a consumer welfare standard of

antitrust law, it's hard to see -- it's hard for me to see why Amazon Prime would be a practice that anyone would want to challenge.

MR. CONNER: So, Dick -- I'm sorry, let me ask Dick and then Pinar.

MR. SCHMALENSEE: I'm in violent agreement with Judy. It is true that unless you have scale as an online platform or an online retailer, you really can't profitably do this, but as an avid viewer of Amazon Prime streaming and an avid shopper on Amazon, I am not made worse off. It is tough for competitors because it seems to be a very effective business strategy for Amazon that does require scale. Costco does it. Other people do it. Of course, when you become a Prime member, you shop more on Amazon. That is the point. It works.

I don't see how you would challenge it. Even under an abuse of dominance standard, I don't know how giving you a two-part tariff is an abuse of dominance, and certainly under the U.S. law, I don't see where you would go.

MR. CONNER: Thank you. Pinar?

MS. AKMAN: I had a similar comment. I think at least anecdotal evidence suggests that when people sign up to Prime, they don't just spend more on Amazon

in the same category, but they actually start shopping from more categories on Amazon, and this leads to more third-party sellers want to join Amazon's platform to sell more in those other categories as well.

So it's essentially a virtuous cycle, and in that sense obviously some more third-party sellers mean more goods, but also then more consumers, and so on, and reducing costs to those consumers, again, because there are more third-party sellers funding Amazon's fixed costs and so on. So, if anything, I think the multi-sided nature of that platform makes the practice more benign in those circumstances.

MS. ATHEY: So just maybe one other consideration here is that if you're an online presence, like an Amazon, then if the consumers trust you and come to you directly and know -- and believe that they don't need to price-compare, then it's actually much cheaper to acquire consumers. And, like, the very, very worst thing, like, that can happen to Amazon is that consumers decide that actually Amazon doesn't have the best prices, and they need to start price-comparing more.

In particular, if the consumer goes to Google and looks for other places to shop, then Amazon has to buy an ad to acquire that consumer back, and

essentially all of the surplus goes to Google. So if you're sort of a -- like a vertical price comparison or shopping type of site, whether it's, you know, e-commerce, like Amazon, but it applies to other scenarios as well, as soon as the consumer thinks they need to go back to Google and look at what the other options are, you've lost all the profit from that customer, because there's somebody else bidding against you on Google who has a similar business model and roughly, like, you bid up to the value of the consumer and you pay it all back to Google.

So that's -- it's sort of a huge threat and concern, and so that concern can induce these firms to really make sure that they're providing a great deal for consumers so that they don't think they have to go back and price-compare. So I think as long as there are, you know, competitors out there who can plausibly offer, you know, similar products at similar prices, it's actually pretty -- you know, if I was advising them from a business strategy perspective, I would tell Amazon, like, I don't care if you've got Prime, and I don't care if you did a study that showed that you could raise the prices 20 percent on any particular product for a particular Prime customer today, I would say don't do it, because if you teach your consumers to

go back to compare across sites, that's actually going to be a really bad consumer habit to create.

So I think, of course, if all the other retailers went out of business, you know, then you would have a very different concern, but it -- at the stage where they're moderate in size and there are other e-commerce firms out there, in the medium run, they want to keep prices low, even though I'm sure if you did a study, Amazon could raise prices on a ton of products in the short run and not lose customers, because we all love our Prime so much.

MR. CONNER: Okay. So I want to turn now to MFNs, and, Pinar, you talked quite a bit in your presentation about this. Jean Tirole speaking about MFNs in the travel industry said that a requirement that hotels use a particular platform allows users to book rooms and -- excuse me, allows users to book rooms that may not offer lower prices on other platforms, and she has said that a higher market share is not necessarily a condition for competitive harm.

Do you think that this is correct? And if so, how would the antitrust doctrine treat those MFNs differently than from other restraints?

MS. AKMAN: Thank you. It would be extremely foolish of me to disagree on a point of economics with

a Nobel Prize laureate in economics; however, other economists have, and Jean Tirole himself did say in the same interview that the economists haven't yet done their homework on this.

This is actually really interesting, because this point ties in really well with the discussion we were having earlier, started off by Susan's comments and then Dick's comments on Susan's comments, so the question of whether these platforms are actually bringing added value, so there are socially valuable services, or are they essentially a negative externality on the consumers who don't use the platforms, because I think it's exactly in that context that Jean Tirole made the comment.

In his book as well, he basically suggests these platforms shouldn't turn into parasites, because he thinks of them, at least, as a private tax levied on the platforms -- levied by the platforms on the consumers who don't use the platform. So as Judy mentioned in her remarks, he refers to that point about them imposing a negative externality on consumers, but then essentially putting that together with Susan's comment later that these platforms reduce search costs and make it so much easier for consumers to, you know, find what they want to buy or what they want to book, I

think there's a question about whether these platforms bring socially valuable benefits and essentially whether the commission that the hotel is paying to Booking.com is worth that added value the platforms bring as a socially valuable benefit.

In terms of market power, I think there has to be some level of market power, because if this platform has no market power at all and it's not a gateway to, let's say, a unique group of consumers, then I don't see why the supplier, be it a hotel or a book publisher, wouldn't just walk away from that platform and go sell elsewhere. So that level of market power certainly does not need to be at the level of market dominance, but I think there has to be still some level of market power which would provide essentially the platform with a bargaining chip to go to the suppliers to say I have these unique consumers -- again, this is similar to what Jean Tirole was mentioning -- and if you want to sell to these consumers, you will have to join my platform, and you will have to pay my 30 percent commission fee.

So in short, I think market power is relevant but not necessarily at a level of dominance.

MR. CONNER: Tom?

MR. BROWN: So I just wish I had a little bell

like Clarence in It's a Wonderful Life that I could ding whenever we fell into this gap between are we trying to optimize market outcomes or are we trying to protect the process of competition, because like this conversation falls squarely in that gap.

MR. CONNER: So I will say I'm not sure what price angels would get every time you dinged on vertical restraints, but...

MS. CHEVALIER: Let me, if I could just add to that, I do think that this is an area which requires a little more work, and I -- you know, we talked about it in the context of the travel MFNs. An antitrust case which -- two antitrust cases that were settled which I think about in this light is our -- the cases against SESAC, which SESAC is a music licensing entity. It's a for-profit company. It competes with ASCAP and BMI, which are cooperatives, and they settled two antitrust cases that were brought by television and radio licensees.

And the argument was something like even though SESAC has a relatively small share, we need SESAC licenses because you can't really functionally operate a television station without one. And I think there's an interesting -- I have not studied this issue, and I think no one has to the appropriate extent in terms of

empirically and theoretically, and I do think that it has something to do with this question of a platform that is -- is there or are there separate considerations somehow for a platform that offers a gateway to a unique set of consumers? And how do we have to think about the fact that they have made real investments in servicing and serving that particular set of consumers?

So, again, I think -- I would give the antitrust -- I would allow the antitrust laws to do a little more than just stop industrialists from blowing up each other's factory, but I understand this is actually -- but I agree with Tom, this is actually in the area of, you know, how much -- you know, how exactly would we make a kind of disciplined set of rules around that that make sense.

MR. SCHMALENSEE: Just a quick reaction on another point that would go in the same direction. Imagine a booking site that has a relatively small share of bookings, but that signs platform MFNs or most favored customer clauses or contracts with a wide range of suppliers. So if you just looked at booking share, it's small, but if you have those contracts with a wide number of -- a large number of suppliers, you have affected the whole market, even though you, yourself,

are not a major player in the market. So how would you get those contracts signed? That's an interesting question, but if you did, even if you had a tiny share of bookings, you would have a large market impact.

MR. CONNER: Susan?

MS. ATHEY: Yeah, just not to get into a philosophical argument about law and economics, but I do think that actually it's -- it can be very useful to put the law aside initially and think about an industry -- and think about the business strategy of the industry or the economics of the industry, understand how competition works, what are the existential threats, and what are the types of concerns that would make a firm act in the interest of consumer welfare, like if the only thing a firm can do is improve their product quality or cut price, then, you know, it's pretty clear that, gosh, more competition makes them improve quality and cut price, and that's good for consumers.

So, you know, if that's the way that market works, then I can sort of just -- you know, the normal legal structure will probably work pretty well, but if I think about contexts that have a lot of scale economies, have a lot of chicken and egg problems, and I have firms that have a lot of strategies available to

them that are not improving their price or decreasing quality, strategies like, you know, steering consumers away from current competitors or potential competitors or other things, I mean, sabotaging your opponent's factory is one, but there's actually -- the modern business world actually has a lot of different kinds of practices that aren't efficiency-enhancing, and, in fact, when faced with competition, you can -- you could be going along behaving very nicely, and then when confronted with a perceived competitive threat, you could start using some strategies that are very welfare -- bad for consumer welfare.

So I think understanding the business and economic contexts, the strategy space, the incentives, the way that incumbents and entrants think about problems, is pretty crucial, and if you start trying to put it into the legal framework too quickly, you'll start getting caught up with market definition and, you know, oh, gosh, we don't do predation cases because they always lose, and, you know, that kind of sounds like predation, and so you can kind of like, you know, just shut down the conversation before you've really understood the economic tradeoffs.

And then, of course, we have to decide whether achieving economic outcomes that are beneficial is

possible in a clear, simple legal framework that doesn't cause more harm than good, but I think first having a pretty clear view of the economic outcomes, especially for having a debate about what policy should be or what the law should be, is kind of the right place to start. We can decide that it's too complicated to get to the optimal outcome, but we need to understand what market competition looks like, and also we need to understand what kinds of behavior firms will engage in and what those consequences will be in the short run/long run before we decide that the legal framework is good or bad.

MR. CONNER: So, Tom, this is actually a question from the audience, and you are not going to get away from your sabotage example.

MR. BROWN: Okay.

MR. CONNER: Judy and Susan both picked up on it.

The question is, you distinguish law from economics by referring to borderline industrial sabotage versus defining outcomes. Price-fixing is about outcomes rather than sabotage. Is your distinction not somewhat limited?

MR. BROWN: So not in the context of unilateral conduct, and when we're talking about vertical

restraints, we're really talking about unilateral conduct in another garb, so I think the distinction is actually robust. Good question, though.

But I -- and, I mean, I agree with Susan about sort of thinking and deeply investigating the nature of business conduct. I think what the -- the reason for sort of prompting and recognizing the gap, right -- in the sort of, you know, "London Tube mind the gap" sense -- is that the conversation we're having over the last couple of days about platforms and about the significance of Ohio vs. American Express and whether Ohio vs. American Express represents some significant departure from the way we've understood antitrust law for almost a hundred years, like 99 years to be exact, and I don't think so.

I mean, that -- the -- that case is about a legal tactic that had been adopted by the Department of Justice over the last 20 years, which was to say that we don't have to define the broader context in which we've identified some behavior that we think may lead to anticompetitive effects. Once we identify something we don't like and we can point to higher prices on one side of a jointly consumed product, the burden shifts to the defendant to say that there's no restraint.

I thought that was grossly unfair and

inconsistent with U.S. antitrust law when I was a baby associate defending Visa on a case that was so stated. I thought it was grossly unfair, though highly ironic -- and in that sense enjoyable -- when the case was brought against American Express, but the -- like, the -- in thinking about the law, like, this is -- this is not a change. I mean, I think we can look at Ohio vs. American Express in the same way that we look at U.S. vs. Chicago Board of Trade, and not much has changed in a hundred years.

MR. CONNER: Okay. So moving on to the next question, which actually is directed to Tom and also fits right in with what you were talking about. So some commentators have argued that the best way to evaluate welfare effects of vertical restraints by multi-sided platforms is to look at marketwide output, measured by the total volume of transactions, e.g., the total number of credit card transactions.

If the total number of transactions is increasing, we should be less skeptical that the restraint is harmful. The Supreme Court in the AmEx case appeared skeptical of the plaintiff's theory in part because of the evidence that marketwide output was increasing. Is marketwide output measured by transactions a useful way to think about competitive

effects in vertical restraints by multi-sided platforms?

MR. BROWN: Hmm. So I'll take the first stab at this question, but I actually -- sort of recognizing the limits of my economic intuition -- I think it's in some ways a question that as a lawyer I would first go to an economist to get an answer to.

MR. CONNER: And to be clear, I am going to follow up with Judy, so don't worry.

MR. BROWN: Again, I think that antitrust struggles to make -- antitrust, as a law, right, as opposed to thinking about the role that competition should play in public policy generally, which is sort of a way of more broadly framing the debate, I think antitrust really struggles to identify empirically observable facts that support a prior hypothesis that something is bad.

I think it's certainly possible to look at increased output in a particular industry and to come away from the conclusion that that should at least give us some pause as to whether the underlying conduct is anticompetitive, but the reason that platforms are interesting, right, is that they demonstrate increasing returns to scale. So from an overall consumer welfare perspective, from a social welfare perspective, it's

not obvious that more output equals more benefit for society or consumers as a whole. Like, so I think it's kind of an uncertain signal.

MS. CHEVALIER: Yeah. So I think, you know, in a simple antitrust framework, I think looking at whether the conduct is output-increasing or output-decreasing is a pretty good way to go. I do think -- I do think there's a bunch of issues that make it tricky. First of all, you mean output-increasing relative to the appropriate counterfactual but-for, and I haven't studied the AmEx case well enough to know whether the appropriate counterfactual but-for is actually what was being considered, but I do think there are a set of complications, especially -- you know, the credit card cases -- the credit card cases -- and I have no dog in that fight, because I have never worked on a credit card case. I don't really have -- I have not studied them at great extent, but given that one of the arguments in the credit card cases is something about an externality, when there's something about an externality, then you do actually want to be careful about making an output argument as the kind of basis of deciding whether something is anticompetitive or not.

I think we almost always are going to come --

the economists are going to almost always come down on this side of, you know, you are really going to need to do a lot of case-specific economic analysis. I am going to caution against a hard and fast rule.

MR. SCHMALENSEE: Yeah, I think it's a -- just saying output went up, therefore, this was not a bad thing, what you sort of got in the AmEx decision is a little simple. The other side is, oh, prices to merchants went up, so it's a bad thing. Wait a minute. You really do have to look at the facts of the case, and I would stress Judy's point, which is all about counterfactuals. This is all about what would have happened if.

So output is useful in assessing importance in a marketplace, for instance. It's the way people do shares in the payment card business, but output going up by itself doesn't necessarily tell you anything.

I'm reminded of -- I didn't know this, but a few years ago I did a compilation of articles on deregulation, and the one that surprised me the most was one of the times cable television was deregulated -- it was regulated, deregulated, regulated, deregulated -- one of the times it was deregulated, two things happened. Prices nationwide went up, and output went way up, because the regulation

had constrained bundling in such a way that the bundles were unattractive.

When the operators were free to optimize product, they offered more attractive offerings. People paid more for them. People were happier. There were more subscribers. So just looking at "Q" doesn't necessarily tell you anything of interest.

MR. CONNER: Susan, and then Tom.

MS. ATHEY: Just, I mean, maybe to reiterate an earlier point about marketplaces, so if you think about a simple example of a marketplace, imagine it's, you know, the first entrant, and so it's running its own marketplace. It's not that worried about competition as essentially a monopoly marketplace. Even if you're giving business strategy advice to a monopoly marketplace, you -- the first way to think about it is that a marketplace is a matchmaker, and it's trying to expand output.

And so to a first approximation, when I teach my students, I say, actually, marketplaces are kind of fun businesses to be in, because you're mostly just trying to make everybody better off. Like, you're trying to make a -- make transactions smooth, and to the extent that you're -- where you're charging, what you should try to do is charge in a way that minimizes

distortion. So you want to maximize output and charge in such a way that you don't scare away buyers and sellers, because you have these indirect network effects, so there's like an extra sort of cost to pricing people out of your market.

So, you know, it's -- and that's one reason I like working with marketplaces as well, because in some sense that's more -- I'm thinking -- when I'm advising a business, I'm thinking more like the social planner. So from that perspective, you know, the marketplaces, a lot of these tactics of making sure that sellers provide high quality, potentially kicking people off a platform, can all be welfare-enhancing, and, indeed, expansion of output would be a good sign.

If you've squeezed suppliers, but it makes more people use the service, then that's a -- that's a good sign. I think where you get into trouble is in situations where there's sort of longer term strategic issues going on, where you're worried about, say, one of your suppliers growing so big that they compete with the platform, or when, you know, you're worried about various types of disruption or entry that really threatens the platform's viability, that's when, you know, people engage -- firms engage in sort of more problematic behavior.

Not to say that platforms don't exert market power over their participants in some cases, not that everything that they do is in the social interest, but a lot of the nonprice -- you know, if there's a price you're charging, of course, that's a little bit zero sum. If you're charging a fee for using the platform, that's a bit zero sum between the platform and the sellers, and they certainly might charge higher fees than social welfare would suggest, but a lot of the nonprice terms are often about making the platform more effective as a whole. Not always, but that extent -- looking at the output standard could be a good way to think about it.

I just want to agree with Judy, though, that if your main issue is externalities, you certainly, in the credit card case -- I mean, I have not also worked on these cases -- but, you know, if I think my main problem is that cash-paying -- that this whole system is regressive and that cash-paying consumers pay higher prices, and there's this big cross-subsidization going on, then you should presumably include those consumers in welfare calculations, if you think that's the main economic harm.

MR. BROWN: So I am going to actually give a disclaimer on the credit card cases, too. I don't work

on them. I have not worked on them in years. I have no reason to believe that I will ever work on them again, notwithstanding the fact that I was once in-house at Visa and think that not everybody there hates me, but, you know, apparently too much exposure produces some sort of antibody reaction.

The -- I do want to talk a little bit about the particular context, though, of the U.S. vs. AmEx case, because I think it's interesting, and it sets up a point about natural experiments that I think is important to think about from an antitrust policy perspective. So just bear with me for a second.

So when the Department of Justice first brought that case, they also challenged rules that Visa and Mastercard had that were similar to, though not necessarily congruent with, the AmEx steering rule. So the industry conduct -- and there was no claim that the rules had been adopted on a concerted basis, that they had just emerged in parallel. So you have the three then major card networks, each of which has some rule that says that you can't discourage people at the time that they've expressed an interest to use some other form of payment.

Visa and Mastercard, in response to that complaint, repealed their rules, and the sort of

missing person here, in case you're sort of wondering, like, who cares about any of this stuff, it's -- let's just identify it -- it's Discover. So Discover is sort of -- and DOJ's sort of -- by adoption -- theory of competitive harm was that somehow these rules prevented Discover from being more than -- you know, let's just be honest about this -- a rounding error in the payments world, which if you just sort of step back and think that that's a little implausible, like there are other things going on that explain, like, why you're fourth of three.

But what that -- I know, that's -- it's mean, but it -- you're laughing because it's a little true, too, like that's -- but so what that then set up was an opportunity for a natural experiment, right, because you had an industry where Visa and Mastercard had had rules, repealed them, and so for merchants that only accepted Visa, Mastercard, and Discover, and not American Express, did you see behavior different than the behavior that you saw in the AmEx-accepting merchants.

And for me, like, that's the dog that doesn't bark in the case, and, again, I think consistent with why it seems sort of goofy to begin with, like, DOJ does not attempt to introduce facts into the record to

establish that the conduct that they believed had been suppressed by the existence of the rules, in fact, then appeared in that universe of -- like, this is not a small universe, 3 million merchants that accept Visa and Mastercard and Discover.

So -- and the reason for sort of pointing to that, right, is that I think -- like, this counterfactual point comes up over and over and over again when you're litigating an antitrust case. Like, is it in somebody's head? And here you actually have a real world opportunity, a real lab in which to see whether the thing that you say was suppressed was, in fact, suppressed, and you didn't see it. So, like -- I mean, I don't want to beat a dead horse on how bad that complaint was, but, like, that -- like, that -- like, we just shouldn't be outraged at the result in the Supreme Court.

MR. CONNER: Judy and then Susan.

MS. CHEVALIER: Let me just put one footnote on that, and that is we may not be entirely done with this set of issues. I know there's some -- there's been some -- and it's just press reports right now, but there's some recent discussion about Target being kind of particularly vocal about this, that they want to -- they don't actually want to discourage all Visa and

Mastercards, but they actually don't want to take the super high rewards cards, and so they actually want to be able to discriminate across Visa and Mastercards, which, you know, might actually -- you know, so we may not be done with seeing the dog barking that you're describing.

MS. ATHEY: Yeah. I actually wanted to bring up another case that hasn't come yet, at least in the U.S., but may end up not ever being an antitrust issue, but it involves also credit cards, but the credit cards are now on the other side of this argument and actually would like to get rid of anti-steering provisions in a different case.

So this is a case of ApplePay. So those of you who have tested out ApplePay or seen it starting to get more accepted, you see that you could put a credit card into your Appeal Wallet and then use that to make transactions. What you might not know is that behind the scenes, some -- about -- depending on which country you're in, about 0.15 percent of that transaction is going to Apple, and in addition, it's actually not possible to create a competing wallet on the iPhone, at least not one that uses the NFC radio, which is part of the receivers for accepting ApplePay.

So this is a case where Google is a little more

of the good guy on this particular issue and that you can have multiple -- there's an NFC radio in the phone, and the nonprice exclusionary provision, if you like, which is present on the iPhone is that the only place you can access the NFC radio is through the Apple Wallet.

So anybody can use the flashlight, anybody can access -- all the apps can access the maps or the buttons, but there is one feature on the iPhone that you can't access, and that's the NFC radio that's used for payments. The only way an app can access the NFC radio is through the Apple Wallet, and the only way a card can go in the Apple Wallet is if you basically share the interchange fee with Apple.

In addition, there are no-steering provisions. So in particular, the credit card company cannot charge the consumer more or affect merchants either to -- as a result of this fee. So you can't tell the consumer, hey, you have to pay a little more if you use the Apple Wallet rather than your physical card, okay? So those no-steering provisions make the consumer completely insensitive to whether they use the phone or the card, but it's imposing an additional cost on the system.

And so this comes back to platform competition, because you might say, well, gosh, I thought, like,

Apple and Google were competing for consumers, and so, you know, if there's lots of great wallets and lots of credit cards in wallets on the Android phones, then maybe people will switch over to the Android and away from their iPhone.

But the problem is that if you ask a consumer, you know, would I switch phones because my CitiBank Visa is not available in my Apple Wallet, but, you know, my Chase Visa is, most consumers are not going to switch phone operating systems over the availability of a single card.

So in the end, the credit cards are now the sad -- they're in the same position the merchants were in the AmEx case, and they say, oh, gosh, what do I do? If I don't go put my card in the Apple Wallet, then my consumers will just use another credit card that is in the Apple Wallet, so, gosh, the credit cards -- sort of a prisoner's dilemma problem -- collectively they would like to be able to negotiate with Apple to get that fee down, but individually, none of them have enough power, and so in countries where the banks are fairly -- they're fragmented, like the U.S., they all just capitulated and generally put the cards in the wallet and paid the 0.15 percent. This is -- all the business terms are confidential, so I just have read things from

news reports, but in other countries where the banking system was more concentrated, they negotiated those fees down a bit.

And, you know, broadly you might say the answer ultimately should be that maybe countries should just regulate that fee. So if you think about -- if you're a country, not the U.S., that's not getting the benefit of this Apple fee, and suddenly there's like a 0.15 percent tax on all transactions, you might just say that's sort of too high, I don't want to regulate it down, but we could also think about the role of antisteering provisions in this type of case, and we could also ask whether, you know, there's an antitrust issue with basically locking down access to the NFC radio within the platform, which is kind of a form of exclusion.

So I'm not making a policy recommendation right now as to whether this should be the antitrust law or this should just be regulation of the financial system, but it's a place where these economics, you know, come into play, and, you know, we might say that that fee sounds a bit inefficient.

MR. CONNER: Okay. I am going to turn to what may be the last question, looking at our time, and I am going to direct this to you first.

So many of the vertical issues that we have been grappling with today are not new, and, Dick, you pointed out in your opening statement that newspapers, for instance, are the two-sided -- excuse me, are two-sided markets where the product is free or low cost to one set of users -- you mentioned your weeklies that come in free -- but that are funded through the other side via advertisers.

We have now moved to technology platforms that have similar characteristics. How is the analysis different, if at all, in any of these issues if the platform is free to users and garners revenue via advertising? And does the lack of a strong indirect network effect running in both directions affect how we should think about predation, restraints, MFNs, when they're ad-supported?

MS. AKMAN: Thank you. I think when they are ad-supported, market definition really becomes quite fundamental, to get the market definition right in the beginning. In terms of some of the restraints that we've discussed, in practice, they only -- like MFNs, they only seem to be taking place in situations where the platform is not ad-supported because it relates to the platform's commission and so on.

Newspapers are, indeed, a good example, because

there have been newspaper cases where courts, again, around the world have differed in terms of how they approach the market definition issue. A case that involved, for example, Google, Google Maps in France, at one point the Court found that the maps service itself is predatory, full stop, because it's free to consumers. Then that was overturned by taking into account the obviously indirect network effects and the fact that it was funded by advertising.

Similarly, a case in the UK a long time ago called Aberdeen Journals, which had to do with free newspapers competing against newspapers that weren't free, again, market definition was quite critical, and in that case the UK Competition Authority actually found that the free journals still also compete with journals that are not ad-funded and, therefore, it -- I mean, the effects come into play first at the point of defining the market, I think, but then also when you're looking at competition, it still will play a role, but it might be that even with ad-funded media and so on, the competition is still in the wider context between ad-funded and paid for items or products as well.

So I think some of these restraints won't be necessarily an issue in ad-funded platforms, but where the platforms aren't funded, as we have seen in the

AmEx case as well, that brings up a very important issue about what's the relevant market here, because the rest of the analysis seems to follow usually from the market definition.

MR. CONNER: Susan?

MS. ATHEY: Yeah, so I think some of my comments have already addressed some of these issues, but I would say in ad-funded businesses, you need to think specifically about the incentives the platforms have, and so, like, say, going back to Google, which is one of the most successful ad-funded platforms, why does it want to -- why does it worry about, say, competition from Amazon or another kind of -- maybe think of them as a vertical competitor in some way, that Amazon's, like, specialized at shopping?

Well, if people start going directly to Amazon, then not only will they stop going through Google as their entry point, thus sacrificing the ad revenue from those consumers, but then a company like Amazon might also start its own ad platform, which it has, which then could be thought of as a -- which can grow into more of a direct competitor for Google's business model.

So, you know, what looks today like it's just a downstream firm, like people go from Google to search

generally to do shopping on Amazon, as Amazon grows big, it then starts its own ad platform and actually competes for advertising dollars directly against Google, and those types of analogies go across sort of vertical by vertical, some of these websites that are referred to by Google themselves grow into large ad-supported websites, and then they can expand horizontally and develop their own marketplaces.

So the fact that the original ad-funded platform we were thinking about worries about other -- their own advertisers becoming competitors introduces a new set of considerations. It makes that -- and that's partly why we worry about vertical manipulation. You worry that Google might not act in the interests of social welfare, its consumers, because its main motivation is preventing, you know, one of these competitors from taking root and getting large and really peeling people off vertically and horizontally, and it's really the scale economies.

And in the ad-supported business, one other thing to remember is, you know, to be a really successful ad-supported business, you really need to be very, very large. I mean, ads just aren't -- you know, they just don't give you that much revenue. You need a lot of consumers to really be able to attract

sufficient advertisers to be profitable, and so those scale dynamics can be pretty important.

MR. CONNER: Anything else? Okay.

There is a question from the audience. Professor Athey gave an example where consumers will not switch phone operating systems for the wallet because phones are -- I'm sorry, phones are so many products to us. What are some other implications of this particular point?

MS. ATHEY: Yeah, so I think if you -- so, again, the challenge -- and, you know, I thought about this at some point when thinking about the viability of a third mobile operating system, the question is, like, is there some, you know, killer app on a phone that would really -- if it was available on one phone and not the other, it would really cause you to dump one phone operating system and go to the other.

It just happens, in the case of phones, there aren't a lot of apps like that, especially because you can access services through the browser, so it's just hard to have, like, the killer app on a phone that would cause you to switch. And I would say I would contrast that with video games, where, like, a hit video game on a gaming platform would induce a customer to buy, say, an Xbox instead of a Playstation, so --

and there are some platforms where there are, like, more concentrated content, and that content will take their consumers with them, or like TV sports, like live sports, you know, the customers will follow that content from platform to platform. They won't just be loyal to NBC because -- even if NBC doesn't have the sports.

But with the phones, it's really pretty fragmented, and so there's not a killer app. And so what the consequences of that are that the phone operating system then does have a lot of market power over the apps. It can extract a lot of surplus.

Again, another example I like to think about is, you know, the friction of getting a Kindle book. You know, if you want to buy it on your phone, you tend to have to go to the website and then order it and then come back to the app, because they don't want to pay the fee for the in-app purchase to the mobile operating system. It would obviously be better for the consumer if that was an easier process, but there hasn't been able to be sort of a good consumer solution because of the bargaining problem between the apps and the phone operating system. And so I think that just sort of illustrates that the phones aren't that concerned about the consumer switching from one platform to the other

just because it's hard to buy a book in the Kindle app, and instead, you know, there's actually a fair bit of ability to exercise market power in the app ecosystem.

And so generally, you know, there hasn't been -- you know, as -- there's not as many of these issues as there are in search or vertical integration, but there are some. Like if you think about the music providers trying to compete with the, say, like competing against iTunes, if you have to pay -- if you have to share the in-app purchase revenue, if you're a third-party music provider and you have to share the in-app purchase revenue, that makes it kind of hard to compete with the vertically integrated product.

So I think broadly the dynamics of the competition mean that you have to watch out for the behavior of the mobile phone platforms towards the apps. Sometimes their incentives aren't misaligned, but if they have -- if they own their own vertical product or they see some kind of, you know, really strategic issue, like payments, you might worry -- you might be more on the lookout for anticompetitive behavior or at least behavior that's not in the interest of consumer welfare.

MR. CONNER: Dick, did you still want to --

MR. SCHMALENSEE: No, I'll pass. I'll pass.

MR. CONNER: Okay. So I want to turn to what I think has to be the last question now, and it's something that was prompted by something Susan said, but it's been touched on by, I think, almost every panelist, and that is, in the predatory pricing context, where we have a seller who is not focused on the selling of the product -- and, Susan, you had used the example of thermostats -- but they were in customer acquisition, and, Pinar, you had mentioned this in France with the Google Maps and being per se because it was free.

Where you're trying to analyze predatory pricing and the business model that the person is operating under looks at the -- doesn't look at the product that you're looking at, which they may be selling at either at or below cost, but they're looking at a much broader -- because they're looking at themselves as an ecosystem, and they want to get the personnel into the ecosystem. How do we analyze predatory pricing using the frameworks we've used for a hundred years now -- to cite Tom -- in a situation where the company that's selling the product doesn't actually care what they're selling that particular product for?

So I open that up to the panel, because all of

you have touched on it.

MR. SCHMALENSEE: Yeah, let me jump in. I mean, this seems to me analogous to loss leader pricing, right? I mean, supermarkets sell milk below cost, occasionally to bring traffic in, and I think you'd want to look at the facts of the case. I mean, if the firm is set up to be much broader than a thermostat maker, and that's plainly the strategy and they're plainly set up to implement that, then you might hold back. If it's one thermostat maker taking advantage of a deep pocket to take over the thermostat business, that's another matter.

So it would pose problems, just like below-cost pricing always does, but I don't think that they would fundamentally be new relative to evaluating loss leaders.

MS. ATHEY: Yeah, I would just say, I agree that the loss leader strategy is a very common strategy, and if you're a multiproduct firm in the online case, it totally makes sense to use loss leader strategies. I mean, from a business perspective, the customer -- a platform is trying to acquire customers. They have lots of customer acquisition strategies, and they are going to look at the lifetime value of the customer.

If you think you have a great set of -- a suite of services on your site and if you can just get the consumer to come see how awesome you are, how great quality you have, what great deals you have, then, you know, trying to price very competitively on a product that's very salient to a consumer, even pricing below cost, could be a perfectly reasonable thing to do.

We don't worry about it in supermarkets too much because we think that it's like -- those are pretty competitive, so I think I would really look at the facts of the case. I might think again if a person that was doing it was so dominant that they were sort of picking winners and losers or they were able to put an entire company out of business or monopolize an industry, that there certainly could be facts like that, but broadly, you know, these -- I think these kinds of loss leader types of strategies should be expected, and they wouldn't, just on the face, be, you know, necessarily a problem.

MR. CONNER: And Judy and then Tom?

MS. CHEVALIER: Yeah, I would just quickly say that I think oftentimes a framing to think about this kind of loss leader -- I've worked on supermarkets, so I like that framing -- but I think another framing is in a sense it's a feature on a larger -- I mean,

oftentimes the thing that you're -- you could be preying on is really a feature you've put on a larger product, and we have certainly -- we certainly expect, as technology, you know, improves, that, you know, there are features I used to buy separately for my phone which now I just expect my phone to just have, and I think we wouldn't actually want to stymy that kind of change in the products, and so that's just another framing to think about it.

MR. CONNER: Tom?

MR. BROWN: So I would say call a lawyer admitted to practice in California and bring the case under California's below-cost pricing statute.

MR. CONNER: Well, that's an interesting way to end this panel, but we are out of time. So I do want to thank everyone here for attending, those watching online, I hope it has been informative, and most importantly, I want to thank the five panelists for their contributions. It has been certainly a very interesting discussion. So thank you very much.

(Applause.)

(End Panel 1.)

PANEL 2: UNDERSTANDING EXCLUSIONARY CONDUCT IN CASES INVOLVING MULTI-SIDED PLATFORMS: ISSUES RELATED TO VERTICALLY INTEGRATED PLATFORMS

MS. BLANK: Good morning, everyone. After a very interesting first panel, I hope everyone here was able to see it, I think this will be a great second panel, because some of the topics that we just started discussing in Panel Number 1, we are going to dive into with this panel with this wonderful group of academics and economists and lawyers.

So I am just going to introduce everyone. I guess I will start from the end down there.

We have Hal Singer, who is a managing partner at Econ I Research, a Senior Fellow at the George Washington Institute of Public Policy, and an Adjunct Professor at Georgetown University's McDonough School of Business. It was also just announced that Hal is going to be honored next month by the American Antitrust Institute with an award for outstanding antitrust litigation achievement in economics. So congratulations on that, Hal.

Next to Hal, I think we have Amy Ray, who is a Partner at Orrick, Herrington & Sutcliffe. Amy was recently featured in Global Competitions Review as one of 40 under 40, Class of 2016, antitrust lawyers, in

its global survey.

Next to Amy, we have Nicolas Petit, a Professor of Law at the University of Liege in Belgium, a Research Professor at the School of Law of the University of South Australia in Adelaide, and a Visiting Fellow at the Hoover Institution at Stanford University.

Next to Nicolas, we have Robin Lee, an Associate Professor of Economics at Harvard and a Faculty Research Fellow at the National Bureau of Economic Research. Robin previously served on the faculty at NYU's Stern School of Business.

Next we have Susan Creighton, Co-Chair of the Antitrust Practice at Wilson, Sonsini, Goodrich & Rosati. Previously Susan also served as Director and Deputy Director of the Bureau of Competition at the FTC.

Finally, next to me, I have Lesley Chiou, Professor of Economics at Occidental College. Lesley was previously a visiting scholar at UCLA and at Boston University.

And I should add, I'm Barbara Blank. I'm at the Federal Trade Commission.

So I thought we would just get started, just jump right into the panelists' prepared remarks, and we

are going to start this morning with Amy.

MR. RAY: Hi. Good morning, everyone. I will use my introductory remarks primarily to address two points. First, to set the stage for where we are with respect to Sherman Act Section 2 enforcement in conduct cases, and then second, to acknowledge that perhaps appropriately there's a good deal of scrutiny on competition on and among vertically integrated digital platforms.

So, one, from a view outside the agencies, here's one take on Section 2 enforcement. The last set of monopoly conduct guidelines were withdrawn a decade ago. The most recent major Section 2 conduct case brought by the federal antitrust agencies was against Microsoft. We look back to that 2001 D.C. Circuit liability opinion in Microsoft as a beacon of the agency's ability to tackle tough questions about competition in the technology sphere, yet without federal guidelines or Section 2 enforcement post Microsoft, it might be fair to ask whether our current antitrust law and economics toolkit are up to the task.

I'd respond to that last point in the affirmative, given the flexibility inherent in antitrust law, but perhaps the enforcement approach could benefit from a bit of finetuning, especially as

new platform and aggregator technologies continue to race forward in vertically integrating.

And by the way, I credit Ben Thompson, who was a speaker during Monday's hearings, with putting forward that term "aggregator." I think it's helpful for the types of technology interdependencies we will discuss during this panel.

So moving to my second point, these platforms, or aggregators, find themselves under the enforcement microscope. Echoing my own experience in going under the hood in these types of matters, we need to appreciate both how network effects and platform durability contribute to market power. In unpacking the underlying structure of competition and technology markets, retrospective studies can be helpful to the Commission.

That said, we should be cognizant that history might not capture the dynamism of today's digital marketplaces and the ways in which network effects can be combined with conduct to undermine competition; for instance, in preventing other disrupters from reaching efficient scale.

As just one example, perhaps we can distinguish the historical poster child for efficient vertical integration, the A&P Grocery Store. It faced

competition given that "entry into the food trade was so cheap and easy and that any attempt to raise prices would immediately have resurrected competition." That's quoting from Martin Adelman's book. Can the same be said about digital marketplaces? Well, let's consider a few things.

The availability of behavioral data, which we assume is captive to the platform operator and aggregator only, that allows for precise targeting of customers for its own products. Then combine that ability to target conferred by behavioral data with the incentive a vertically integrated aggregator has to preference its own offerings.

For applicable law, we can look back to the computer reservation system cases and related DOJ commentary. I have a feeling some other panelists may talk about that as well. I'll just read from a 1988 Central District of California opinion. "Display biasing is unreasonably restrictive of competition in that it restricts competition on the merits in the air transportation business, and this type of competitive advantage depends upon the perpetration of a fraud upon the consumer. It is unreasonable and, therefore, an unwarranted competitive advantage because it inhibits competition on the merits."

Also in digital marketplaces, multihoming evidence should receive due weight in assessing competitive effects. To what extent do or don't market players multihome and why? Moreover, we're in an era in which platform aggregators often compete for a market in winner-take-most scenarios. It has been acknowledged that this type of aggressive competition, incentivising monopolies, has produced some of the most spectacular innovations we enjoy today. We, however, should also account for subsequent reduced innovation effects when a monopolist acts to raise rivals' costs, to raise barriers to entry, and thereby to entrench its market power.

Let me propose one data-related hypo to you. Suppose a platform operator opens its data to retailers on its platform to help them refine their products to suit the tastes of customers in a market. It then commits to work with massive market research firms to offer the retailers even more thorough analyses of how to delight those customers.

That example is actually not apocryphal. It describes what Alibaba did when it demonstrated to Mars that Chinese snackers prefer a Szechuan spicy flavor called mala. Mars then introduced a new product for the Chinese market that is now a wildly popular spicy

Snickers bar.

Of course, Alibaba is not -- is a nonintegrated platform. Now, does a vertically integrated platform aggregator have the incentive to share that data? If not, and it opts not to introduce the innovation, that innovation may not come to market. You and I, sadly, might never devour a spicy Snickers bar.

So wrapping up, where do we go from here? Again, retrospective studies could clarify the durability of any single platform aggregator's market power, but these industries move quickly and history has its limits. Are new single-firm conduct guidelines the answer? I submit enforcement policy need not be articulated in that formal a manner. Moreover, we all recognize it was difficult to obtain consensus during the last round.

But practitioners in the business community at large do need some guidance on vertical integration, related conduct, and the range of remedies enforcement agencies would consider. The report coming out of these hearings is a good opportunity for that input.

I'll look forward to hearing my copanelists' contributions and how we apply cutting-edge, vigorous economics to these issues, and I'd like to end with a quote from the late Chairman Pitofsky, explaining his

mind-set on competition. "Antitrust is a deregulatory philosophy. If you're going to let the free market work, you'd better protect the free market."

MS. BLANK: Thank you, Amy.

Next we will hear from Hal, who will come up.

MR. SINGER: I don't have any slides, but I understand that a speech needs to be delivered from a podium. Thanks for having me, Barbara. Thanks for having me, Derek and the FTC.

Dominant tech platforms have the incentive and ability to leverage their platform power into ancillary markets by vertically integrating and then favoring their affiliated content, applications, or wares with their algorithms and basic features. A platform owner should be concerned for the overall health of its ecosystem, which in theory should discourage it from squeezing complementers, but that calculus goes awry when a platform enjoys monopoly power and can take its customers for granted.

Dominant tech platforms can also exploit the vast amounts of user data made available only to them by monitoring what their users do both on and off their platforms and then appropriating the best performing ideas, functionality, and nonpatentable products pioneered by independent providers. If these practices

are left unchecked, the resulting competitive landscape could become so inhospitable that independents might throw in the towel, leading to less innovation at the platform's edges.

In a recent issue of The Economist, venture capitalists referred to the area around the tech giants in which startups are squashed as the "kill zone." Classic examples of new ventures that have flown too close to the sun include Diapers.com, Bearbones Workwear, and BeautyBridge in Amazon's orbit; Foundem.com, TripAdvisor, Shopping.com in Google's orbit; and Snapchat, Timehop, and Grubhub in Facebook's orbit.

A 2017 survey of two dozen Silicon Valley investors suggests that Facebook's appropriation of app functionality from edge rivals is "having a profound impact on innovation in Silicon Valley." Some new findings are consistent with independents throwing in the towel or not getting funded. Per Crunchbase data, VC investing inside of tech, as measured by the number of deals, has declined since 2015 on average by 23 percent in the United States and by 21 percent globally.

In contrast, VC investing outside of tech increased over that same period, suggesting the problem

might be tech-specific, and new research using PitchBook data reveals that broadly defined industries in which Amazon, Google, and Facebook -- inside the Amazon, Google, and Facebook orbit -- experienced a collapse in venture capital first financing since 2015, a reduction not observed in comparable tech sectors.

There are three basic approaches to dealing with this threat to edge innovation. First, we could lean on antitrust enforcement to police discrimination pursuant to the consumer welfare standard. Second, we could police these episodes on a case-by-case basis pursuant to a nondiscrimination standard. Or third, we could erect structural barriers via legislation to prevent dominant platforms from annexing ancillary markets.

I am on Team Nondiscrimination, but before I defend its merits, let me briefly discuss the demerits in the approaches of Team Antitrust and Team Structural Relief. The antitrust path leads to underenforcement because judges increasingly interpret the consumer welfare standard to require demonstration of a tangible, short-run harm to consumers, and yet most episodes of discrimination will not produce a price, quality, or output effect.

Moreover, the snail's pace of antitrust

adjudication ensures that edge innovation would be dead by the time relief could be administered. On the other side of the spectrum, structural separation is a messy undertaking. How one draws the boundaries around a platform's core mission is not straightforward. Not all ancillary offerings require the same level of ingenuity and creativity, and, thus, not all verticals present the same welfare tradeoffs. Barring Google from incorporating a commodity feature, such as answering a math problem, while beneficial to rival math apps, would likely reduce the welfare of users in the short run without any offsetting innovation game.

Finally, structural separation can always be imposed after less invasive behavioral remedies have been deployed without success. The problem from an economic perspective is not vertical integration, per se. The problem arises when vertical integration is followed by discrimination in a vertical that entails innovative or creative energies; that is, in verticals where the best source of innovation is likely to come from independents.

Under a nondiscrimination regime, Amazon would be free to sell private-label mass, and Google would be free to collect and attempt to organize its own restaurant reviews, but as soon as these platforms

vertically integrate, they would be subjected to a nondiscrimination standard. This standard would be enforced via a complaint-driven process initiated by the party alleging discrimination. The standard would prevent Google from limiting its search results for local doctors or local restaurants to Google-affiliated content. Instead, Google would be required to run its page rank algorithm across the entirety of the public web for local searches.

Under a nondiscrimination standard, a vertically integrated Google could discriminate in its organic search results in every dimension, save one, whether the results are affiliated with Google. An added benefit of my approach is that it borrows from the solution to a nearly identical problem concerning vertical integration by a dominant platform in the late 1980s and early 1990s.

The dominant platform of that era was owned by cable operators, many of whom vertically integrated into programming. Based on a handful of compelling anecdotes, which revealed the vulnerability of independent cable networks operating at the age of the cable platform, Congress created a specialized dispute resolution process that operated outside of antitrust and provided a forum for independent networks to lodge

discrimination complaints against vertically integrated cable operators.

The protections were not supported by an econometric proof of diminished edge innovation owing to discrimination, but instead were motivated by a simple political preference, that independent networks were an important source of innovation in content and were deserving of protection.

To create similar protections for independent content providers of the internet era, Congress would have to pass a law with a private right of action. It could give the FTC power to resolve these matters administratively, or parties could develop federal common law on this issue by trying cases before Article 3 judges.

So I have a modest proposal for the agency. The FTC should pursue a Section 2 case against a tech platform when the harms manifest as a price output or quality effect. In the absence of a tangible consumer injury, the FTC could pursue a Section 5 case by treating discrimination as an unfair practice. In any event, at the end of its competition hearings, the FTC should ask Congress to give the agency a new source of authority to adjudicate complaints against vertically integrated tech platforms pursuant to a

nondiscrimination standard. The FTC already has an administrative law judge. Now it just needs a mandate from Congress and some complaints to protect edge innovation.

Thanks.

MS. BLANK: Thank you so much, Hal.

Robin?

MR. LEE: Well, good morning, everyone. First I want to thank the organizers and the Commission for bringing this panel together.

I am going to take a slightly different tack than the previous panelists. I'm going to put on my academic hat and discuss two research papers that talk about platform markets I've been involved with, and this is from the view, as noted by Susan and others in the previous panel, that understanding the economics is a useful first step for later discussion. I hope to show that or how, rather, we can use econometric tools to measure the costs and benefits of integration and exclusionary conduct by platforms and along the way help to emphasize some nuances of these markets that are important to consider when thinking about competition and welfare, okay?

So the first paper I want to discuss is on integration in the multichannel television industry.

Now, this is a setting I'm sure many are familiar with given recent events. Essentially, there are upstream channels, here in orange, that have to contract with downstream distributors, in blue, to access customers. What do we do in this paper?

Well, I, along with several co-authors, including Greg Crawford, Mike Whinston, Ali Yurukoglu, build and estimate a bargaining model in the cable industry in order to quantify the pro and anticompetitive effects when high valued content -- here regional sports networks, or RSNs -- vertically integrate with distribution.

Now, I think multichannel television is a nice industry to start with because the efficiency and foreclosure effects here are present in many other platform environments. In particular, the efficiencies that we measure and focus upon include the standard elimination or reduction of double marginalization, as well as the better alignment of incentives regarding strategic actions. Here, those strategic actions include increased carriage of integrated content, but in other industries, could include R&D and investment.

The anticompetitive effects we're going to focus upon include these foreclosure effects, primarily downstream foreclosure, by which we mean an integrated

content provider either completely excludes or disadvantages rival distributors when it comes to carrying its programming. This includes raising rivals' cost effects.

Now, what we do is we simulate vertical mergers and divestitures for approximately 30 RSNs in our sample period, which is in the mid-2000s, and our key findings are that, on average, across channels and simulations, there is a net consumer welfare gain from integration. Don't get me wrong, there are significant foreclosure effects, and rival distributors are harmed, but these negative effects are oftentimes offset by sizeable efficiency gains. Of course, this is an average. It masks considerable heterogeneity. When complete exclusion occurs, which happens both in our simulations and in the data some of the times, consumer welfare is actually harmed. And this suggests that in this industry, these program access rules that were in effect, by ensuring availability of integrated content to other distributors, actually helped consumer welfare.

Two additional points about this paper. First, this analysis doesn't really quite get at upstream foreclosure; that is, the disadvantaging of rival channels by the integrated distributor. Now, you might

think this may be less of a concern here due to the presence of program carriage rules; however, these rules don't eliminate all potential harm. For example, consider the channel neighborhooding requirement imposed for the Comcast-NBCU merger.

Second, this paper measures really the static effects of integration and doesn't capture long-term effects on entry, exit, investment, and so forth, which can be significant. For this we would probably like to complement it with some kind of dynamic analysis, and to do this, I'm going to sort of highlight another paper of mine that looks at a somewhat more dynamic environment.

This one studies the role of exclusively integrated software in a particular hardware/software market or canonical hardware/software market, the video game industry in the 2000s. You know, this, too, is a platform market. Consumers purchase a hardware platform to access affiliated software titles, but here, as with most technology products, it's important to consider the evolution of this industry over a period of years, right, not just at a single snapshot.

To do this, in this paper I estimate and build a model of platform competition, with network effects, focusing on how platforms try to attract both consumers

and software developers, and it turns out here beliefs over which platforms will eventually succeed are critical in the early months or the early years of this generation.

What's interesting about this particular generation of the industry was that there was essentially an incumbent, Sony, who had released its platform a year before other entrant platforms came to market. There was also a brand new entrant at this time, Microsoft, who previously had never been involved in the video game industry.

The key finding of this paper was that the entrant platforms were able to leverage integrated and exclusive content to their advantage; that is, in a counterfactual world, where integrated and exclusive software prohibited, entrant platforms really couldn't have provided a compelling reason to either software developers or consumers to join their platform. Most software products would have initially joined the incumbent, and consumers would have followed, and this, in turn, implies that exclusivity, given that entrant platforms were able to outbid or outproduce high-quality content, encouraged platform competition.

This analysis also emphasizes the -- how a reduction in platform competition can appear to maybe

have small short-run effects but very large long-term effects. Here, without subsequent entry by successful platforms, prices would have been higher, and industrywide quality and software development likely reduced over time.

Now, these similar findings about the benefits of platform competition exist elsewhere. For example, in a related study in television markets, Economists Austin Goolsbee and Amil Petrin measured consumer welfare gains from the entry of satellite television distribution to be on the order of billions of dollars per year. Thus, although facilitating competition within platforms for complementary products is desirable, this suggests that cross-platform competition can be just as, if not more so, more important.

And one last point before concluding. I think Amy touched on this point as well. In this industry, multihoming is really important to consider. Here, the heaviest users and the source for most industry revenues, they bought multiple platforms, and I bring this up because the extent to which consumers can multihome matters for how platforms compete. For example, if you're a platform, you don't really need to access all complementary products to be successful.

All you really need to do is offer a compelling set of certain products to get some multihoming consumers on board.

Similarly, any product can potentially be brought to market and be successful even if it's excluded from one or several platforms. So on that point, I'd like to pass it along to the next panelist. Thanks.

MS. BLANK: And we are going to move on to Lesley.

MS. CHIOU: Okay. So, yeah, it's wonderful to be here, and I'm looking forward to our panel discussion. So in the spirit of Robin's remarks, I will also put on my academic hat and use the next few minutes to share some of my research that I've done on platform markets. In particular, I want to talk about two papers. The first looks at a platform introducing new products, and the second looks at a platform copying content from other sites. And in both papers I find that this type of platform content can have significant consequences for the use of third-party sites by consumers.

Okay, so my first paper in the Journal of Law, Economics, and Organization, I'm looking at whether or not or actually how a platform introduces or integrates

product into its particular platform. So in this case I'm looking at search engines. So if you have your laptops handy or, you know, your cell phones, feel free to pull up Google, and you can sort of look along. Just do a keyword search for flights to D.C., and you'll see in this case that you'll get a set of search results, and they'll have links to various online travel agencies, like Expedia, Travelocity, and you'll also see as well Google's own product, Google Flights.

So the question I'm interested in is, you know, how does the integration of Google's own products, in this case Google Flights and at the time Google Zagat restaurant ratings, how does that affect the use of third-party sites? So, what happens to Expedia and Yelp?

And so my results actually show two opposing findings. So, the first is that when Google integrates Google Flights, what happens is that a usage of online rival travel agencies decrease, but on the other hand, the integration of Google's Zagat ratings actually increases the use of other review sites on Google.

And so, in other words, what this is saying is that Google Flights is serving as a direct substitute or a direct rival to other online travel agencies, while Google Zagat restaurant ratings are actually a

complement towards other review sites. So it seems that, you know, the consequences for third parties really matter whether you're looking at consumers searching for quality information or pricing information. And so I'll circle back more to this after I talk about my second paper.

So, in my second paper, so this is joint work with Catherine Tucker in the Journal of Economics and Management Strategy, and we're interested in looking at what happens when a platform copies content from another site. And so, in particular, we're interested in how a news aggregator, like Google, functions when it shares headlines or short extracts of articles from other news sites.

And so what we find is that when there's a sudden and large removal of news content from this news aggregator, this actually leads to a sharp decline in consumers' visits towards other news sites from Google, all right? So, in other words, Google News here is not serving as a rival to other news sites or as a direct substitute, but, rather, it's serving as an upstream referral to these sites. And, in fact, in particular, what we find is that consumers tend to use these news aggregators to locate information that they might not otherwise find, so content that is more unusual or more

niche, more highly localized news.

And so if you take these two papers together, what this is showing really or what this suggests is that platform integration of either its own products or content can really shift consumers' use of third-party sites. So when consumers are looking for or exploring information that is more unknown, so perhaps looking for a restaurant they haven't visited or today's news, this type of platform content can enhance the use of third-party sites.

On the other hand, when consumers are looking to confirm prices or perhaps to make a purchase, this type of platform content can have a negative consequence for rivals, all right? So, thank you, and I'm looking forward to our panel discussion.

MS. BLANK: Thank you, Lesley.

Nicolas?

MR. PETIT: Sure. Thank you, Barbara, and thanks again for the invitation by the FTC. It's a great opportunity to talk about great topics.

So I'd like to give a bit of context and then make two general remarks on the topic. So the context first, as we heard, there's a lot of clamor against platform strategies or vertical exclusionary conduct, and there is basically two main families of allegations

which are made. The first involves leveraging conduct, where the platform gives preferential access display or placement to its own products or services at the expense of rivals. The second family of claims involves vertical integration itself, so the platform would sort of undertake aggressive M&A or copycat innovation to squash actual or potential competitors. So this is a sort of standard Amazon story, uses data on merchants or from merchants to favor its own businesses. It's like, you know, in the X-Men, there is a character, I think it's called Rogue, and it can absorb other mutants' powers just like that. So it's a bit the same sort of thinking.

So with that in mind, the first high-level remark that I'd like to make is that I think antitrust could better acknowledge that the social costs of vertical exclusionary conduct by platforms is risk-class dependent. So what I mean by that, that harm to consumer welfare is higher when we see exclusion of firms with a cross-platform threat kind of potential.

By contrast, the harm resulting from the exclusion of harms without disruptive potential should be a lesser concern for antitrust policy. So there is nothing groundbreaking in what I'm saying here, but my

perception of the current conversational framework is that we are not quite seeing that discussion or that distinction. We talk about whether to protect inter versus intraplatform competition. We talk about substitutes versus complementer competition. We talk about remedies between platform and edge innovators. That framing is not necessarily useful, because risk classes are independent from these concepts, and real platform threats can come or not from those substitutes and edge products.

So Microsoft Bing, for instance, the complainants in the leveraging case in Europe and elsewhere against Google Search, strong interplay from competition, not sure that this represented platform threats for Google.

Diapers and batteries, intraplatform competition to Amazon or edge competition, is this real -- is there a real risk of platform threats through those kinds of products and services, I'm not too sure about it.

And so what I want to say is we risk missing the real big thing here if we are basing enforcements on the basis of frameworks, which are not actually helping us distinguish between the real platform threats, which is a sort of, you know, big consumer

harm type of category, versus the lesser harmful type of anticompetitive conduct.

So to be a little concrete, the law sometimes draws a distinction, and we heard yesterday on the panel on the Microsoft case, that the Microsoft case was a lot about platform threat type of conduct and applications barriers kind of threats. We also know that the U.S. Merger Guidelines tell us that mergers can reduce competition when they eliminate a maverick company. So I think antitrust policy could perhaps go a little further and think about drawing the full consequences of the various types of risks of foreclosure when it designs priority -- a priority agenda or tests or rules and standards for enforcement, and, for instance, you can say we are going to prioritize cases which involve real threats of platform disruption versus cases which do not really represent that type of risk for market competition.

All right, so that brings me to my last point and my last remark. So I read a lot of work being done on platform-specific harms to competition, and I read much less work on platform-specific vertical integration efficiencies, and I'm not talking here about all the efficiencies that we know from the econ literature about, you know, preventing holdup, reducing

double marginalization, and that sort of stuff. I'm talking about things which are read in sort of, you know, management or, you know, startups kind of literature, and so in those books, there is a lot of interesting material.

So in the tech world, there's sort of received wisdom concept, which is adding verticals, adding verticals is a sort of recent concept, and it's a concept that people talk about when they're talking about growing a company. So in the growth stage, platforms also use adding verticals as a strategy to accelerate customer acquisition. So Facebook, for instance, invested multi -- invested a lot of money in acquiring multiple companies for email scraping purposes to be able to find out the people to invite to the service.

E-companies like Amazon, for instance, started in one segment, like, you know, e-books in 1997, and at very quick pace added on music and video, adding verticals, or, you know, the same with Uber and Lyft, adding eats and scooters and other kind of verticals. So when firms add verticals as part of their growth strategy, the real hot question for antitrust is the following: So we may welcome adding verticals as a growth monetization strategy for startups, but should

we change the assessments for firms that are no longer startups, like incumbent platforms? And when should be the tipping point where adding verticals no longer is legitimate?

So in this discussion, you also have to bring into the mix the thinking about the fact that late entry is often the sort of norm in the tech industry and often a source of efficiency. Think about Google entering mobile OS or think about maybe Amazon today trying to enter some verticals because maybe things that -- the verticals on the platform do not do good service to customers.

Now, I just want to close with one last statement. This concern about adding verticals may not be -- you know, and this efficiency about adding verticals may not be so pertinent in technology areas where you have a lot of ex ante coordination, for instance, in standard-setting organizations, where you can clear all the sort of details through an ex ante trial and error process and discussion within industry.

But in industries like the tech industry we're talking about today, there is no such process, and so it may make sense to let companies add verticals later to sort of capitalize on the experience of previous experiments by smaller firms and provide to consumers

value for money. Thank you.

MS. BLANK: Thank you so much, Nicolas.

Susan, last but never least.

MS. CREIGHTON: Well, thank you, Barbara, and thank you again to the Commission and for having me on the panel.

So I wanted to maybe step back, and Amy mentioned history. I actually thought maybe step back even further and give a historical perspective. I have been representing tech companies in antitrust for a really long time now, but that -- the history goes back even further than I do, of grappling with this problem about vertical integration, particularly understanding it to mean technological innovation in both hardware and software platforms for at least the past four decades that I'm aware of.

So examples to think about would include the IBM peripherals cases in the late 1970s; the Antitrust Division's two Microsoft investigations; the FTC's 2010 Intel investigation; and the FTC's 2012 Google investigation.

So the IBM -- just to give an example of what are the kinds of issues those cases involved, the ones that people might be a little less familiar with, the IBM cases involved IBM's integration of previously

separate components, such as CPUs and disk drives. So this integration eliminated a lot of cables and wiring, but it also hurt the business of competing peripherals manufacturers.

The first Microsoft case, people tend to forget, prohibited the tying of Microsoft's MS-DOS with its Windows 3.1 windowing software, but expressly permitted their integration into Windows 95, and so on.

So apart from the cases, if you -- sort of the things that didn't get challenged or didn't become famous in the antitrust world, you see even more examples of platform competition through product integration.

I mentioned yesterday, David Evans has a nice summary of the history of portal competition among the major portals, AOL, Yahoo, and MSN in the '90s and early 2000s, to illustrate how adding features is often how platforms compete with each other. As Dr. Evans noted, that portals competed intensely by adding features such as email, messaging, search, news, shopping, sports, maps, video, and travel. Some of those may sound like platforms today. They were verticals then.

On the hardware side, Apple innovated on its iPod platform by adding mobile telephony and internet

functionality to the iPod, which they famously advertised as a three-in-one device, and then they gave it the name of the iPhone.

So if a review of the history of tech platforms over the past several decades and, you know, in the caricature of antitrust tech world, you know, you would say you have gone from a caricature of IBM as the only company out there to the Wind Hill duopoly to the three big, you know, sort of portals and how scary AOL looked, and now we're talking about big five or I've lost track of how many big platforms. All through that, the arc of that history, we've seen vertical integration is a striking, pervasive, and distinctive feature of platform competition.

So it says the protection and promotion of innovation should be a paramount goal of antitrust enforcement. Antitrust enforcers should tread with particular care when they're challenging that kind of product innovation.

Now, that's not to say that innovation should be per se immune from antitrust scrutiny. The courts and agencies, their consent orders have upheld liability where the supposed innovations were essentially shams. They made no business sense but for their anticompetitive effect, such as when they

actually impair product performance or amount to a deceptive bait and switch.

I think one of my favorite examples was from the IBM peripherals cases. IBM found out that sort of the amount of load that its rivals could carry was, like, 30,000 bits and up, so it designed the product only to go up to 29,000. That would be a good example of a product that served no efficiency benefit.

But that said, I think two themes that consistently run through the cases, run through the consent orders, are themes that have served us in good stead and that we would do well to follow. The first that is in practice, the courts consistently have upheld product integrations if they determine that the integration provides an actual benefit to users even if those changes impair competition from a rival's product. Such a finding, whether the court has articulated their test as a balancing test or some other kind of test, in practice, I would submit, has found that when they find that the product innovation will actually benefit consumers, that finding has acted, like in the predatory pricing world, like a finding of above-cost pricing. Where found, it's conclusive.

The agencies' consent orders have faithfully

reflected that state of the law even with dealing with fencing-in relief to cure alleged antitrust violations. Just to give one example from the FTC's history, I'd point you to Section 5 of the FTC's 2010 Intel consent order. So this is in the context of, even with fencing-in relief, it expressly permitted Intel to make design changes to its product that would "improve its performance, operation, cost, manufacturability, reliability, compatibility or intraoperability" even if those changes degraded the performance of a competitor's product.

Second, the courts and most expressly in the D.C. Circuit's two Microsoft decisions, they have recognized that it's a mistake to apply a backwards-looking assessment of market demand and market definition in the antitrust assessment of product integration in platform markets.

So in Microsoft, this actually arose first in the first consent decree case. We didn't really spend much time on the Microsoft panel yesterday talking about that case, but since the consent order permitted Microsoft to "develop integrated products," so, again, the consent order very faithfully, like the Intel consent order, reflecting this consistent agency concern, and this was over the course of a decade and a

half, because I think that consent order was from '93 or '94, like the Intel 2010 consent order, and in that case the D.C. Circuit was wrestling with what did "integration" mean, since it was dealing with sort of the combination there of Windows 95 with the browser, and the Court observed that integration implies the combination of things that specifically were separate, but then it rejected the notion that it would make sense to apply tying laws, backwards-looking separate demand test, in those circumstances, precisely because sort of the kind of thing that Robin was flagging.

It effectively penalizes the first firm to innovate by combining what previously had been two separate features. I think maybe Susan -- I think it was Susan or Judy mentioned on the last panel sort of using it on her phone, previously -- so, you know, having functions that previously were separate, and then she was -- you know, sort of they just came with the phone.

So the example the Court gave, which I particularly enjoyed, was they said, "Just because Kodak recognized separate markets for parts and service, that should not make a self-repairing copier an unlawful tie."

So as we talked about yesterday, the D.C.

Circuit, in its subsequent Microsoft Section 2 case, used that same kind of rationale to reject the idea of applying a Section 1 per se tying analysis to platforms precisely because of the ubiquity of this bundling and the pervasively innovative character of platform software markets. I think it's the kind of -- sort of the example that Robin gave of Microsoft innovating through its vertical integration to compete with Sony.

So in that context, I think the courts and the agencies respectfully have gotten things exactly right. So I think because product integration is integral to how platforms compete, and for that matter to competition in most, if not all, high-tech products and services, we have been tending to focus on platforms here, it's been equally true of hardware and software, but it's also been true of nonplatform products. The number of products that used to be separate that are now combined, system on a chip, that kind of thing, we should be very wary of rules that could inadvertently chill the development of the D.C. Circuit's self-repairing copiers.

I, for one, every time I stand at a copier and get it jammed, would welcome the innovation of a self-repairing copier and the elimination of all paper jams, even as much as that development would be less

welcome for those in the copier servicing business.

MS. BLANK: Thank you, Susan. As would I, by the way.

So thank you so much to all of the panelists. We are going to move on to questions, and one housekeeping note, as with the first panel, there should be FTC staffers walking around with notecards, and please feel free to take one and write down a question for the panelists.

With that, though, before we move on to questions, I wanted to give everyone a chance to respond to any of the introductory remarks by other panelists, if there are any.

MS. CREIGHTON: Actually, Barbara, sorry to pile on, having just finished, but I did -- I thought it was interesting, just as we go forward, to think about what Lesley's research and kind of in light of what Robin's research showed, just, for example, on the -- just to pick one of her examples on the flight search, because, you know, I think if you pick up on something that Michael Salinger had mentioned, he said, you know, there is no such thing as a general search, and sort of this goes to the point about the importance of multihoming.

I think most people in 2010, if they were

asked, hey, let's -- you know, why don't you do a search for what flights you want, the first place you'd think of probably to go would have been Expedia, and then maybe Travelocity after that, and then maybe, I don't know, you would think of Google, but you wouldn't kind of have very much in the way of expectations of it being -- producing a very good effect.

So another way of interpreting Lesley's sort of findings is that sort of Google adding those flight search capabilities actually was enhancing competition to what was then sort of the dominant Expedia, and so the substitution effect she found is exactly what we would be hoping sort of that you would be seeing in terms of interplatform competition.

So I'd just point that out in light of, you know, sort of like Robin's example of Microsoft competing against Sony. It's worth thinking about sort of the -- you know, I think the empirical economic research is great, and it's wonderful to be seeing the results, to be kind of thinking about sort of what -- sort of as we're framing our questions, not to be getting into sort of an assumption, which I don't think either Lesley or Robin were suggesting, but that sort of, like, somehow in a -- you know, we live in a very -- oops -- multihoming world, and so sort of

getting into a world of sort of assuming that everybody competes on a platform and then another platform and then another -- you know, that that can be a constraint that I don't think necessarily reflects how people's consumer behavior actually is.

MS. BLANK: Thanks. I appreciate that. Actually, on that note, you, Nicolas, and several others, Lesley and Robin, all referred to this kind of adding of verticals and whether adding verticals and integrating technologically somehow is -- how we should classify that, and with apologies to Nicolas, I hesitate to admit with him sitting here at the table, that we at the FTC -- and me, in particular -- spend a lot of time thinking about what we know as interplatform competition versus intraplatform competition, where verticals are added to a platform.

Now, I know some argue that that's a false divide or we shouldn't think about things that way. Of course, Susan referenced the Microsoft decision. There was a whole panel yesterday on the Microsoft decision. Microsoft, in my interpretation, really did focus on that question, the idea that these verticals, the Netscape navigator, the Internet Explorer browser, were these vertically integrated products, but the D.C. Circuit focused not on the tying and dominance in this

downstream market -- certainly the DOJ brought that claim -- but, rather, the impact of that tie on the upstream operating system market, and the first panel -- I wasn't going to raise AmEx, but I'm crazy, so I will.

The first panel spent a lot of time on AmEx, and I thought one of the points that may have been overlooked, there was no one pro-DOJ on that panel, so I am going to argue on the DOJ's behalf, that one of the points that I thought didn't really come up in that first panel was this idea of vertical restraints that uphold or soften competition among the platforms, and that was certainly underlying the Department of Justice's theory. It wasn't about the vertical restraints or one might argue it wasn't about the vertical restraints and the antisteering. It was how those antisteering provisions affected competition between Mastercard, Visa, Discover, and American Express.

So my question for the panel -- and this is for all of the panelists -- is when people like me sit around the FTC or DOJ staffers, what should we be thinking about in terms of intraplatform competition? Should we ever really care about intraplatform competition for the sake of that competition between

websites on Google, between merchants on Amazon, or Apple's vertically integrated products versus a rival -- versus a downstream rival, or is the only -- or is the only real issue in a case whether we can prove interplatform competition -- evidence of interplatform competition harm.

Anyone who wants to answer.

MR. SINGER: I'll take it.

MS. BLANK: Please, Hal.

MR. SINGER: So, you know, I actually think that the question is premised on a false assumption of interplatform competition. I think competition among the platforms here is exceedingly weak. I don't think from a consumer's perspective or a user's perspective you would view what Google is offering in terms of search to be a reasonable substitute to what Amazon is offering in terms of e-commerce or what Facebook is offering in terms of social media.

In fact, this competition is so weak that Google, I think last week, finally pulled out of the social media sphere, and to me that was incredibly significant, because if Google, with all of its resources and accumulated data and network effects, can't overcome the Facebook monopoly, then who can?

So I really reject this notion that

intercompetition -- interplatform is occurring and is all that significant. My skepticism, by the way, of antitrust being the right tool here isn't whether a plaintiff or the Government could show that Amazon or Google or Facebook were monopolists in their respective fiefdoms. That would be fairly straightforward. My skepticism is whether or not you could show a tangible harm to consumers in the short run.

You know, I think about Google, say, making an efficiency defense in a case. This could come up, and they say, no, no, no, the reason why we invaded a particular vertical is because we were worried about DuckDuckGo breathing down our necks, and just think about that for a second. Would it survive the laugh test in a court? Probably not.

We don't know why Google is making its decisions of how to invade, but we do have a paper by Feng Zhu that investigated why Amazon is invading its verticals, and the authors in that paper -- it's a Harvard paper and just got -- Harvard working paper, just got published in the Strategy Journal, but they determined that Amazon was not making these invasion decisions based on improving the ecosystem for the platform, but instead, was scooping up profits that were previously earned by independents. So I do think,

in summary, that harm to innovation at the edge is a worthy policy objective, and it should be pursued and policed by the agencies.

MS. BLANK: Please.

MR. PETIT: Thank you, yeah. I just want to, you know, think about this concept of interplatform competition. I mean, what are we -- what kind of platform competition are we talking about? Do we want five search engines competing against each other, five OS for mobile, do we want six competing email services? I mean, are these really, you know, the social optimum that we want? I'm not too sure.

I think what matters is to understand that interplatform competition in tech doesn't really occur in the core market functionality where the incumbent is present, and so once you sort of start thinking this way, you think about the fact that interplatform competition is not horizontal, but sort of adjacent. So, you know, the battle for the user interface is a good example, where you've seen generations of user interface applications replacing each other, and that battle for, you know, being the prospective platform is why it is interplatform competition instead of horizontal competition for, say, search or email functionality or personal social network.

And I think as long as we have a healthy degree of adjacent interplatform function by the meaning that I just mentioned, where some people see kill zones, I think a lot of people see opportunities. So you could think that, you know, a monopoly in the platform market that you're looking at is not really a kill zone but a lighthouse, which tells entrepreneurs where they should not invest and deflects effort towards trying to envelop, bypass, leapfrog or, you know, just sort of obsolete the platform that you are talking about. And I think we don't, in the antitrust world, manage to capture that source of competition, which is prospective in nature.

MS. BLANK: Anyone else?

MR. LEE: I'll make one point. If we sort of adopt this intra versus interplatform framework -- and, Barbara, you alluded to this as well, I think it's a nice point to make -- that even if it appears that interplatform competition is relatively robust, there are several platforms, you want to think about the possibility that intraplatform harm can lead to harm or softening of interplatform competition.

For example, if you have a platform that, let's say, makes its customers more reliant on integrated or exclusive products by perhaps disadvantaging rivals or

not providing products served by rivals, you might be increasing switching costs, lock-in, and so on and so forth. So although something may look reasonable right now, over time, the situation could change. So I just wanted to sort of bring that point up again.

MS. CREIGHTON: Yes. So, Barbara, I agree -- well, I mean, I agree with you on your characterization of the Microsoft case, and I do think it was -- the theory of that case really was the harm to -- it can be to a product that's an intraplatform product, so, you know, like when Microsoft misled the app developers over polluted JAVA, you know, that was a harm to JAVA, but the point was sort of creating the harm to the interplatform competition, and that was definitely, you know, I think the -- you know, it was interesting hearing that, you know, sort of in -- in the Microsoft case in the U.S., you know, the Department of Justice didn't even challenge the idea of the dominant firm bundling and giving away for free and making a default its browser, which by comparison is the Android case in Europe.

So what was sort of not even challenged in the U.S., you know, we heard was sort of the basis for liability in Europe, but what was the real focus in the U.S. case was sort of real, kind of early recognition

of the importance of multihoming, was the restraints that were adding on top of that, preventing users and the OEMs from being able to allow switching and allow multihoming.

And so those are -- I think those are a great example of what you were talking about, about that's a vertical restraint, but its harm was impairing the multihoming and the switching that would have facilitated the interplatform competition.

MS. BLANK: Thank you.

Related, one commentator, Stacey Mitchell, who must have been very busy, because I heard her name come up in the first panel as well, she submitted a comment from the Institute of Local Self-Reliance, submitted another public comment, also about Amazon -- I think the comment in the first panel was about Amazon as well -- stating that Amazon uses its dominant gatekeeper position to undermine competition from rival retailers and manufacturers that depend on its platform to reach the online market, citing examples such as Amazon taking retailer data on consumers and using it to launch its own products or to preference those products ahead of rivals.

The European Commission has also reportedly, according to news reports, launched an investigation

into these practices. This goes to the heart of what we were just talking about, a platform investing in verticals or preferencing its own content and how we think about those downstream issues. How should the U.S. antitrust agencies look at this issue?

If I can start with Lesley?

MS. CHIOU: Sure. So, yeah, I haven't looked at Amazon specifically. From my research on search engines, you know, I can hypothesize that there are a couple of things to keep in mind. So the first point is actually something that Susan Athey spoke about in the prior session, about this type of preferencing serving as nonprice predation, so in a way in which you can have a short-term sacrifice for a long-term gain. So maybe in the short run, downranking or downgrading a high-quality site or a high-quality seller on your particular platform, with the hope of recouping in the long run.

I think a second thing also to keep in mind is really how consumers are using the platforms, because this can help identify situations in which, you know, we might be more concerned about this type of preferencing leading to real harm or having -- a platform having a more -- a higher incentive for doing so, versus situations in which maybe we're less

concerned about this happening.

So, for instance, in the case of a direct price comparison or purchasing perhaps on a platform, it could be the case that, you know, this integrated product is going to really act as a direct competitor, direct substitute, and here the incentive and the potential for harm could be great.

And then, finally, another point relates to what Susan mentioned earlier about, you know, does this integrated product represent an actual benefit to users. So in what way, if any, does the integrated product represent an improvement to rivals. So you can imagine a case in which really it doesn't, or there could be instances in which the integrated product is, in fact, superior, either through the product itself, it's better, or that consumers have some benefit of seeing, within that ecosystem, and using that integrated product.

MS. BLANK: Thank you.

Does anyone else want to comment on that one?

MR. PETIT: Yeah, maybe I just can, you know, tell you a little what the European Commission did in the Google Shopping case, operating under the assumption that no one in this room read the 226-page decision of the European Commission, but I did that,

and the reasoning might inform -- the reasoning of the Commission in that investigation.

So the Google Shopping case is -- on the facts is sort of, you know, a standard case where you have a platform which has its own comparison pricing service, and it does -- so the platform, Google here, was accused by the European Commission of having done two things: resorting to the product integration, so integrating the comparison pricing functionality of a bunch of independent providers of that service; and second, applying ranking penalties to competing comparison shopping websites and services that it did not apply to its own Google Shopping box, which appeared very prominently on the search page.

Now, when you look at those facts, you could think, well, you know, the European Commission probably has followed a kind of run-of-the-mill discrimination/leveraging theory of harm and established its case on that basis. It is not what the European Commission did. So if you read the decision, you will understand that the logic in the case is not a logic of Google trying to leverage and basically replace independent function by its own service. It's basically a logic of equality of opportunity, and I think those words appear in the decision. The

Commission says that the problem that Google denied equality of opportunity to competing products, it sort of, you know, cured the air supply. That's it.

So you don't find the sort of, you know, fancy IO language of stability and incentives to foreclose secondary markets. Nothing of that appears in the opinion, and you don't find the -- you don't find the words "leveraging" in the European Commission decision. There is no -- no such thing there. So I think it's fair to say, on the basis of that case and that reasoning informs what the Commission do -- will do in the Amazon investigation, that you can actually move quite fast to find liability under Article 102 in such cases.

MS. RAY: All right. And I'll just add that, you know, if it's the case that Google was preferencing its own verticals above those that were of lesser quality and applying the scores to punch down the results of competitors, looking at U.S. law, that's probably cognizable as a consumer harm under the consumer welfare standard.

MS. CREIGHTON: Yeah, so just on the -- not to get too detailed on the facts, but the reason -- one of the reasons for the differences in outcome between the U.S. and the E.U., I would submit, is that in the --

the FTC's findings, where the conclusion was, as I've mentioned before, I think, sort of really the clear law in the U.S. is that if you have a product design and it benefits consumers, that's pretty much the end of the story.

Google competed -- you know, its argument in the E.U. was not that it was trying to compete with DuckDuckGo but that it was trying to compete with Amazon, and so the -- you know, what the defense was that the -- Google was trying to improve its product relative to Amazon, and I think, as Nicolas was suggesting, I think really the EC's concern was that not -- even effectively stipulating that that were the case, that there could still be quality of opportunity problems with that. I think that's a pretty fundamental difference between the two jurisdictions, but...

MS. BLANK: Okay, thank you.

So we've spent a lot of time this morning talking about Google, Amazon, I've heard Facebook mentioned, and in the first panel as well. We haven't -- Susan Athey mentioned Apple for a brief second in the first panel, and, of course, the biggest difference between Apple and Google and some of the others is that Apple is, of course, a closed platform

from soup to nuts. It manufactures its own hardware. It puts its own software. It is not an open system under any sense of the word.

Is there something unique about a closed platform like Apple, or to a lesser extent Facebook, that makes preferencing one's own content or integrating or these kinds of vertical integration issues we've been talking about today less harmful?

Please, Hal.

MR. SINGER: Well, while I'm making friends with the platforms, I'll pick on Apple as well. Apple would not be immune from this nondiscrimination regime that I am pitching, and I think that you can -- you can understand what Apple is doing on its app -- in its app space to be very similar to what the other platforms are doing that I discussed earlier.

There was an old case regarding Google Voice, where Apple wouldn't allow Google Voice in The App Store until about -- I think it was resolved in 2010. I understand that Apple is alleged to be using its terms and conditions to keep certain independent apps out of The App Store that might compete against its own apps. Then most recently I came across a story in which Apple took off an app that was offering a time management tool, and Apple was trying to promote its

own. So I actually thought that sort of discrimination in favor of your own app would lend itself very naturally to the nondiscrimination regime that I have in mind.

And then, you know, finally I'll just say that I think there's something to be said for regulatory symmetry. I wouldn't want to peddle a regime that would uniquely pick on Google. I think that -- I think that it's important that whatever -- whatever set of rules that we come up with at the end of this ought to apply equally to all the platforms, and so, you know, it's important that it -- that both Google, Apple, Facebook, and Amazon would be subject to these sorts of complaints.

MS. CREIGHTON: So I just -- I wanted to quarrel with the hypothetical a little bit or the premise or something, because it might help, just in terms of how we think about platforms, that, you know, like if you just take iPhones and Android devices, for example, neither Apple nor Google make their devices, so Apple uses what are called ODMs or original design manufacturers, while Androids are made by OEMs, and in some ways that distinction is more about contract terms than anything, because the same company can be an ODM for one customer and an OEM for another customer.

So the difference really relates to the degree to which the company that makes the device is given a specified design. So whichever model you're following, how much flexibility you can give can vary. So, like, Microsoft followed an OEM model with desktops but didn't give its OEMs very much flexibility. So there's sort of this range here, and I think, maybe to pick up on Hal's point from a slightly different angle, I do think that that business model choice about how you choose to distribute your product shouldn't really affect how we think about openness for platforms, because I think both -- in all three of those examples, Microsoft, Android, and Apple, they were all open in the sense that they were a platform that tried to attract not just users, but also third-party apps.

So originally I think Apple reportedly had been considering not having any third-party apps on the iPhone, but, you know, as soon as -- so, like, I think of more of a closed platform as being like BlackBerry, say, you know, sort of in the old days, where it really did -- there were no third-party apps available for it, but I'd say that once you have an app store, you are a platform, and so I guess I'd say whatever rules we're thinking about, you know, you could -- if you're -- just to give a hypothetical, if you were Apple, you

know, you could do a polluted JAVA, right?

I mean, you could be encouraging -- you could be making representations to their app developers and then changing the terms and creating lock-in. There's -- so I would encourage the Commission not to be distinguishing different business models where really kind of the platform nature was -- people were calling it -- was it platforminess, is that what they were calling it -- that the ODM/OEM part of it is really not kind of fundamental to the antitrust analysis.

MS. BLANK: Okay. On Hal's proposal of nondiscrimination, we seem to have a lot of audience questions about this issue, so I'm just going to read one of the questions.

What do the panelists think of Hal's suggestion about Congress granting the FTC broader authority to enforce a nondiscrimination standard? Anyone?

MS. RAY: I'll take it, Barbara.

You know, creative. I said in my opening remarks that perhaps we let the antitrust remedies try it first and then what's of less preference is then to go to a regulatory regime, which is what that would be. You know, you would still have to do some sort of an investigation, and I certainly take the critique that

it takes a little too long to do these conduct investigations, and it's the remedial stage that certainly would be shortened.

But I'd also say another approach is to bring a case and then have a precedent to apply, and even better, that precedent deters similar conduct.

MS. BLANK: Thank you, Amy.

Does anyone else want to comment?

Okay. This question is for Hal himself and relates to something that has come up in our prior discussions in preparing for this panel. One of the questions that we were going to discuss is what kinds of platforms should be subject to these nondiscrimination regulations and how far would that duty of nondiscrimination extend?

One of the examples that I think of in my mind is the idea of a flashlight manufacturer and these -- maybe I shouldn't say this. We get actual complaints about these things at the FTC, so, for example, a flashlight manufacturer being accused of discriminating against downstream battery manufacturers because it changes its design to ensure that only its proprietary batteries work in the flashlight.

You have the Keurig coffee makers that gets attacked by angry consumers when they change the design

of the K-cup so that generic K-cups don't work with it anymore. A great question from the audience is, should supermarkets not be able to put their private-label products on the top shelves? And why should we only have a nondiscrimination rule for the internet, if that's what you were suggesting?

Lots of questions for you, Hal.

MR. SINGER: Yeah, I get -- I appreciate it, and I get that one a lot about am I going to -- is this regime going to restrict what Safeway can do on its shelves, and the answer is no.

So there is two ways to create exemptions as to who would have liability under this nondiscrimination standard. The first would be to put it right into the authorizing legislation, say these protections are meant to discipline and police the large dominant tech platforms.

Now, there's another way, and it's actually my preferred way, and it's what Congress did in the Cable Act of 1992, which is you do it in the evidentiary standard that a complainant has to satisfy in order to prevail at the merits, and so I didn't get into those, but very quickly, the three prongs that a complainant has to establish in these cases is, one, that your app or content is similarly situated to the cable

operators' app; number two, that you were -- you received disparate treatment and you did so because of your lack of affiliation, as opposed to some other efficiency justification, and this is the causation prong that allows the cable operator to provide efficiency defenses. And then third, as a result of one and two, you were materially impaired in your ability to compare effectively or unreasonably restrained.

It's that prong that I believe has prevented anyone from using the nondiscrimination protections to file a suit against, say, a mom and pop cable operator, and the reason is, is that if you were to do so, you would likely fail on that third prong. And so I think that third prong, material harm to the complainant, is what would prevent cases being brought from anyone except the largest and most dominant tech platforms.

I'll just leave with this one last thought. On the Safeway notion, I looked at market shares in brick-and-mortar groceries, and Safeway just doesn't have the requisite share in that market to ever engender the kind of foreclosure levels that would make life miserable for an independent who couldn't get on Safeway's shelves.

In contrast, when you look at the e-commerce

market, you see that Amazon has a significant share and likely would have sufficient size to foreclose an online merchant, and so in that sense, you know, I can't predict how the cases will shake out, you know, how a judge would rule as to whether or not that material injury prong was satisfied, but I can tell you that Amazon would be much a more likely respondent than Safeway if these rules were to come into existence.

MS. BLANK: Does anyone else want to comment on the application?

Please, Nicolas.

MR. PETIT: Yes. So Hal's dream is probably -- you can probably find, you know, a sort of a substantiation of your dream in Europe. It is known that Americans wrote European Union competition law. You know, Robert Bowie, a Professor at Harvard, I think, and George Bull, in Brussels, were the drafters of the treaty provisions that we have on discrimination, and so we have now a provision in the treaty, which is in the chapter on competition, which says that it's unlawful for a dominant company to treat similarly situated trading parties differently, thereby inflicting on them a competitive disadvantage, right?

So we have that, and so the question is, what have we done with that American creation in Europe?

And the answer is, well, we have not really applied it because it's very complicated on the facts. So the notion of competitive disadvantage lies in the eye of the beholder. You know, level playing fields, all those things are extremely, you know, difficult to gauge on the facts.

And I think the third prong of your test would not only make fail complaints against mom and pop cable providers but also against large companies, because it's very difficult to substantiate such claims.

So what we know from our experience in Europe is that when the European Commission has received complaints of unlawful competitive disadvantage in abuse of dominance cases, instead of treating them under that legal basis, they sort of move the case to another theory of liability, like leveraging or equality of opportunity, as I mentioned before, and sort of skirted the discussion on discrimination, because it's just very complicated.

MS. BLANK: Although if I can follow up and ask you again about Google Shopping, some would argue that Google Shopping really is about a dominant platform not being able to pick winners and losers, the remedy at least that was suggested. What is your view on that?

MR. PETIT: So I agree that the outcome looks

really like sort of, you know, nondiscrimination outcome. The reasoning that went into the case was very, very abstract and very formal. You know, the Commission was simply talking of equality of opportunity, thereby sort of implying that everyone should have an opportunity to be on the platform, you know, regardless of what Google did on the facts.

So the reasoning of the European Commission is not predicated on the legal basis that belongs to nondiscrimination. I don't think the concepts of discrimination appear literally in the decision. The European Commission talked of equality of opportunity, and that basis only was material in reaching that outcome.

MS. CREIGHTON: Yes, just to -- oh, I'm sorry.

MS. BLANK: No, both of you, please.

MR. LEE: No, sure. I wanted to just bring up a point that's related but I don't think has been brought up quite yet, and that's in regards to regulation that might, let's say, tilt bargaining leverage away from platforms towards a product market where the participants have market power. And I'm not quite sure if Hal's proposal would fall into this bucket, the details do matter, but what I mean is the possibility that, using an analogy from healthcare

settings, if you think of insurance providers as a platform by which consumers join them to access medical providers, you know, I have a paper with a coauthor that examines, let's say, minimum network standards or must carry provisions.

In that setting, we find that actually those provisions, although motivated by access and making sure people can get to doctors and hospitals that are close to them, can result in higher negotiated input prices and potentially higher premiums, thereby harming consumer welfare. And this happens because insurers are able to play off substitutable providers against one another, and these substitutable providers actually have local market power, and, you know, healthcare is fairly concentrated in most local markets.

So pulling back now to the tech space, it could be the case that Amazon in certain product markets is really negotiating with manufacturers, and those manufacturers are concentrated in whatever products that they're offering. And so one just wants to bear in mind that there are other potential consequences that can happen when we impose these kinds of restraints on what platforms are and are not able to do.

This also comes through, like, cable

television, can they design bundles, leaving off certain channels, to better cater to consumer preferences, and perhaps those would be considered as efficiency justifications for doing what they're doing. With regards to negotiating better prices, it's perhaps unclear how to think about those savings.

MS. CREIGHTON: Yes, so I just wanted to make three, I guess, practical points, you know, sort of concerns about Hal's proposal.

The first one is if you read his articles, I think Hal shows a commendable concern about not having the process become too encumbered and slowed down and that kind of thing, but just in terms of the practicalities, you know, what we're typically talking about here are claims about technological favoring or tying.

Barbara may recall, she and I were involved in a case once -- not involving any company that's been named, to my knowledge, in these hearings -- but there was an alleged sort of allegation that this was -- it was a software platform -- that they were engaged in discrimination and ended up having to, like, examine the code, you know, sort of retain a -- have a clean room, and it was like the most kind of crown jewels of the company's business, so sensitive trade secrets,

experts galore, you know, sort of the practicalities of this just sort of -- you know, I guess would be one thing to sort of be kind of thinking about.

A second concern would be, you know, sort of -- although I think Hal is intending to sort of focus this on, you know, sort of -- I guess sort of smaller players being able to challenge dominant firms, you know, that's all kind of in the eye of the beholder, very heavily dependent on market definition, who's dominant, who's not. That seems to be an area that I would say is chronically underexamined in terms of how do we define products in this space, partly because of the integration problem, the dynamism and stuff.

But just the likelihood of dominance, of, in fact, firms with market power being able to game the system seems to me extremely high, just to -- I guess back when I was representing Netscape, you know, they had 70 percent browser share. I remember somebody at an agency joking, you know, why aren't we investigating you? You know, so it's not all that hard to imagine Microsoft, you know, kind of bringing this kind of challenge against Netscape for being dominant in browsers and slowing it down.

You know, and then just the final concern, and kind of related to that second one, is I think one of

Hal's examples in one of his papers is sort of the preferencing that Amazon has in their home assistant for Avis. You know, that would be a great example of a market where, you know, it's just barely getting going, got five or six firms all tumbling into this market all at one time, and sort of if you think about sort of untying -- you know, what is the technological preferencing plus gamesmanship plus innovation in the market, which is -- you know, it's very hard to imagine kind of -- there's a reason you end up going slow in antitrust matters, and sort of the potential for gamesmanship and for getting it wrong is pretty high.

MS. BLANK: Hal?

MR. SINGER: Yeah, let me just respond really quickly to Susan's three points.

On the question of practicality of implementing a nondiscrimination regime, we don't have to look to Europe. We can look to the United States and the cable experience. We have a handful of cases that you can go look into and see how they were adjudicated, how they were resolved. NFL Network vs. Comcast, MASN vs. Comcast, Tennis Channel vs. Comcast -- and I have to disclose, I was the complainant's expert in each of those, and I am no longer invited to the Comcast Chanukah parties -- but, you know, we just need an ALJ

and we need an evidentiary standard. So I'm not sure if what you meant by practicality is that it's cumbersome or too difficult to enforce this.

In terms of -- if what you meant was that we have to go in and redesign, you know, someone's search algorithm, I reject this notion, too. Remember, if Google were a respondent in such a case, the complaint, as I hear it, is that Google is being asked to run its page rank algorithm in its exact form, in all its glory, on the entirety of the web, period.

That is, there's no change being sought to the algorithm. It's just that instead of populating the one box -- and I should explain, this is the display that appears at the top of the screen for certain searches -- rather than limiting the content in that one box to Google- affiliated content, Google instead would be required, if it were to lose the case under this regime, to run its page rank algorithm in its exact form on the entirety of the web, right?

So no one's asking for a change in the algorithm in that sense. And, by the way, if Google won that race or won that competition on the merits, you know, its local content scored highest per Google's algorithm, then Google's content ought to go into the win box.

With respect to rent-seeking and gaming of the system, again, I point back to look at the case history of cable. You know, I can tell you the cases. I just mentioned three. There's about two others. You never got a rival distributor using the system in order to slow down a cable operator. So that just never happened there, and I think that you can do that with respect to standing. The purpose of these rules, again, were to promote independent cable networks that were being discriminated against by vertically integrated cable operators.

And then, finally, I don't think the Google Assist -- sorry, the Amazon Assist in steering you to Avis is a great example of vertical integration followed by discrimination. I see Avis as being a third party that's getting preferenced by Amazon. I don't think that would be a great case to bring under this process.

What I'm thinking more of is when Amazon sits back and figures out what types of merchants are making a lot of money on its platform and then decides to copy those ideas and to promote its own Amazon private label merchandise. That's the kind of fact pattern that I think would be ripe for a case.

MS. BLANK: Thanks, Hal.

On that note, another question from the audience. You're very popular.

Is your idea, this nondiscrimination standard, predicated on the FTC's failure to bring a case against Google in 2013? And would your plan have addressed that failure?

MR. SINGER: That's a great question, but I don't think it's predicated. I would still be arguing that there are gaps in enforcement under the antitrust laws and under the consumer welfare standard, regardless of what the agency did in that case.

And I just want to point out, too, that if this regime were to exist on the sidelines, it would in no way immunize the tech platforms from antitrust cases. I mean, take Comcast. There have been famous antitrust cases bought against Comcast in light -- during the period of the nondiscrimination regime. You probably heard of a case that went up to the Supreme Court called Behrend vs. Comcast, which was an antitrust case concerning clustering. And so I don't think that it would in any way foreclose an agency from bringing a standard case.

What I said in the speech, and I'll just remind folks, that, again, if it -- I don't want to send someone into a landscape that I expect them to lose. I

don't think anyone would want to do that for whoever they're advising, but -- and this is an important but -- if you can find a case where the harm presents itself as a price, output, or quality effect, then by all means the FTC should bring that case.

And I'll point you to a paper by Michael Luca at Harvard and Tim Wu, Columbia Law, who have shown that there could be a product quality case brought against Google with respect to allegedly degrading its search results in order to favor its own content. Now, that was on -- granted, that was on a very limited search term, and I think that you would probably need a greater sample on a bigger database in order to bring a case based on that kind of product, reduction in quality, but that's a case that I think could, with further evidence, lend itself to analysis or to scrutiny under the antitrust laws.

MS. BLANK: Staying on this nondiscrimination legislation that would give the FTC this authority to pursue these kinds of cases -- and this question will be for some other panelists responding to Hal -- does requiring nondiscrimination skew the incentives of platforms to create innovative and often free content and free ecosystems?

And perhaps I can ask Lesley, who's sitting

here quietly, to address that.

MS. CHIOU: Sure. So Nicolas mentioned earlier that the growth strategy of firms can also include adding verticals, so I would say, just based upon economic theory, that there are incentives for platforms to innovate and to provide sometimes a free experience for one side of the market, outside of integrating its own product or having any sort of preference for its products.

So this is really just part of being a platform. It's really in their best interests to maximize the number of transactions that occur to make sure that as many are occurring on their platform as possible, and so a lot of times that means offering, you know, the platform free to one side of the market to have a critical mass of consumers or sellers in order to attract the other side. This could also mean, you know, innovating to enhance the user experience on the platform, really just anything to create more transactions on the platform.

MS. BLANK: Does anyone else have any comments on that?

MR. PETIT: Yeah, I just want to say that, you know, there is like a fair amount of literature which explains that when firms have imperfectly appropriable

assets, it makes sense to add verticals or, you know, try to extend the scope of the firm in order to recoup investments, you know, and fixed costs and other things. And so I think that literature -- I mean, no one has sort of shown me that that literature should not apply to platform markets or anyone say that there's sort of standard theory basis about, you know, the digital world as a world in which you don't have much appropriability in terms of, you know, IP rights and others, which would entitle you to sort of not go through scope or verticality to recuperate those investments.

MS. BLANK: You know, Nicolas, one of the comments you made earlier that I wanted to get back to -- and this reminded me of it -- is I think in your prepared remarks, you suggested this idea that we should consider whether a platform can add verticals, can vertically integrate depending on the size -- I think the size, nature of the platform, and I apologize if I'm misparaphrasing what you said.

I'm wondering if that concept takes into consideration the kind of vertical that a platform would be considering, this customer acquisition vehicle, and whether it also requires the antitrust agencies to make guesses as to whether any particular

vertical integration will actually add to the dominance of that upstream platform.

MR. PETIT: Um-hum, okay. Well, that's a tough question. The questions are tougher in America than in Europe. That was very kind for me to say that.

Now, I -- so one way to try to address your question and one sort of puzzle that I think a lot of observers have when they look at enforcement against platforms in verticals is why Google Shopping but not Google Flights? And why Google Flights and not Google Music? And why not YouTube?

And when agencies apply antitrust in a particular case, those cases are often minimized in terms of their impact by the defendants, which says this finding is for the particular case, and exemplified by complainants trying to sort of explain that those findings should apply across the board to other verticals of the platform.

And I think one of the ambiguities of antitrust enforcement is that you have those findings of liability in a particular market, regarding a particular infringement, and a particular company, and there is very little we can infer in terms of the general deterrence effects and/or the general implications of the findings.

Maybe, you know, you could think regulation should be there because at least with regulation you get a clear sense that the rules apply across the board. You could, you know, think this way, or another possibility is to try to promote rulemaking by administrative agencies so they can explain that the findings made in particular cases should, you know, extend to certain markets, not others, or all markets. I mean, that's sort of the thinking I have on that.

MS. BLANK: Thank you, I appreciate it, and I apologize for catching you off guard.

MR. PETIT: No problem.

MS. BLANK: So I want to turn to -- with our last ten minutes, I just want to make sure we hit on this topic. It's been the hottest topic in antitrust discussion for the last year or more. Of course, the commonality of all of these platforms -- Google, Amazon, Apple, Facebook -- is that they collect data. They collect lots and lots and lots of our data.

For example, look at Google, which appears to have real clout across every point of the display advertising chain, online display, you look at the buy side, the sell side, the ad exchange itself, and Google is right there at every point. That is a lot of data about each critical point along the advertising

continuum.

Does data, in and of itself, provide a competitive advantage to a platform like Google or Amazon or Facebook?

Maybe we can start with Robin on that question.

MR. LEE: Sure. You know, I do think that there's a sense in which data, say about consumer demographics or product preferences, can be seen as essentially a cost-reducing or perhaps quality-improving technology, much like know-how or experience that's sort of gained through the production process. Absent that, you need independent investment to gather it. So if it delivers a cost advantage, for sure, data can be seen as a competitive advantage for a platform.

Now, one thing that I want to sort of flag and one key consideration -- this is going to inform policy about that -- is what's the minimum efficient scale that a platform needs to achieve to be competitive, to perhaps get to the lowest quality adjusted cost of production, let's say? And, you know, questions arise.

If that scale is so large that really only one viable platform can exist, right, it brings along with it a whole host of natural monopoly concerns or regulation issues. So just things to hopefully have other panelists talk about as well.

MS. BLANK: Oh, please, Lesley.

MS. CHIOU: Yeah. So, actually, I just want to talk a little bit more about what Robin mentioned about a potential quality advantage. So this is something that my co-author, Catherine Tucker, and I looked at. So we wanted to know whether or not search engines, if they could retain longer periods of user logs, search logs, whether or not this would lead to better quality searches for users. So this is a working paper. It's not published because we didn't find sort of any empirical result.

So what we did was we looked at, you know, differences in data retention policies, and we found that, you know, whether or not they were lengthened or shortened, that it didn't quite affect -- we didn't find any effect really on the quality of search that was being delivered to users and consumers.

And so there could be, you know, a few reasons for this. It could be that, you know, having very, very old data doesn't do such a great job of predicting, you know, new information. I know that for Google, at least, you know, 20 percent of searches that happen in a given day are search queries that they haven't seen in the past 90 days.

I do think, you know, that this is probably an

area that we need, you know, more empirical research on. There could be other ways of measuring search quality, something more indirect than what we do, and, of course, there could be benefits to consumers for search engines having longer periods of data, maybe through, you know, algorithm testing or through fraud prevention.

MS. BLANK: Anyone else?

MS. CREIGHTON: Yes. So maybe actually just to pick up on a note of what Lesley was talking about and then maybe kind of more broadly on data, so one of the interesting things -- maybe it was in a paper you co-authored, Lesley, and I know Catherine may have talked about it two days ago -- but the importance of localization. Many people are kind of looking at competitive -- at sort of scale benefits that -- you know, I think she gave the example of I don't really care who has the restaurant reviews in Boston, you know, sort of -- or I -- what I care about is that they're in Boston -- she's at MIT -- and I don't really care if they are in Seattle.

So I think you can kind of take that idea and apply it sort to productize it, sort of like I don't really care -- you know, if I'm in travel search, I don't really care how comprehensive your hotel listings

are if what I'm looking for is, you know, sort of, you know, music search or something, and so an interesting thing will be kind of what data are we talking about that way, and I think some of the -- it will be interesting kind of how that research leads going forward.

But stepping back, you know, sort of -- I did speak on I guess an ABA panel in the spring on the whole big data issue, so I have been giving it some thought, and it will be interesting to see kind of empirically where this goes. Right now, you can color me skeptical, that, you know, it seems it's sort of serving right now as a stand-in for -- you know, by comparison with tangible physical assets, you know, like think AT&T's local networks, the cable companies, the last mile, you know, those are -- you know, it's really easy to see what the barriers to entry are there.

Google's been mentioned a lot here. Google did a lot better job competing against the browser than it did with Google fiber against that last mile monopoly. So as we're trying to think about how does data compare to this much more tangible -- and I think Catherine, actually part of her -- Tucker, part of her research has been on the importance of network effects being

localized to physical, tangible hardware, so -- but if we're talking about big data kind of then abstracted away into some purely virtual environment, you know, I just haven't really seen examples of that being borne out, like in the mergers that the FTC has been looking at or something.

You know, in fact, if you -- I would have argued maybe what I've seen more is that the barriers -- that data used to be more of a barrier to entry with -- you know, so like I was involved 20 years ago when West and Thompson were merging, and there was a question about, in legal research, whether or not the internet could be a constraint on legal online searching, and the -- you know, sort of -- in fact, yes, sort of the DOJ concluded it could for current cases, but the problem was that there were all these states that had, you know, sort of like basically no records of their past cases.

So that was a legacy data problem, and that actually seems to be coming up a lot in a lot of the FTC's recent cases, you know, so like the concern about -- I think in Verisk-EagleView. There was sort of the concern about archival footage involving roofing. Nielsen-Arbitron involved kind of the value of the historic radio and TV panels. So clearly data

can be a barrier. I guess the question is, is that barrier going up or down as we're moving to a more virtual world?

One of the -- it was interesting to me because our firm was involved in this, sort of the one big data examples that Gal and Rubinfeld pointed out was in the BazaarVoice-PowerReviews merger, and said that was sort of the -- that was their example of the merger that best reflected concerns about big data. You know, respectfully, you know, sort of ratings and reviews are actually kind of the antithesis of big data.

I mean, they are actually held up as typically you don't need big data, which is really more about extrapolating odd correlations when you're looking at massive data, because you have just got one review, and what I really care about is this guy said this restaurant's good.

So it's actually an example of a non-big data kind of data sat, and PowerReviews itself had only 11 million in sales at the time it was acquired, so it doesn't exactly conjure up visions of some massive amount of data. So I think it remains to be seen kind of whether or not big data is going to turn out to be a problem.

Just two other thoughts with respect to whether

or not it is a lot of sort of the dropping -- the plummeting cost of data collection, analysis, and storage, is it actually going to facilitate competition? So we were also involved, our firm was, in the Zillow-Trulia case, and I think it's been estimated that something like 99 percent of all data currently is unused. Those were companies who figured out how to take public domain databases about real estate sales and try to create a database that could be at least a partial substitute to what has been a legacy, huge, historical advantage of the multilisting database.

And so one of the things -- this will be interesting as time goes on -- is to see how much are we seeing companies innovate in taking public domain and other data sources that are just lying around unused and actually causing increased competition, not decreased.

And then I guess finally it's a sort of -- and kind of relatedly -- you know, so the question about if there's a lot of different ways to sort of use different data sets to get to the same problem, how likely is it going to be that a company actually engages or tries to engage in foreclosure strategies?

The EC had a very interesting analysis at the

time Microsoft was acquiring LinkedIn on this issue, for example. So the question was whether LinkedIn was going to sort of withhold its full data set from Microsoft's downstream rivals, and I think the EC concluded that, you know, basically everybody said, you know, it was a nonreplicable data set in one sense, but Microsoft was not going to have any incentive to foreclose because there were so many other ways that the customers could acquire that data.

MS. BLANK: Thank you, Susan, and I know Hal wanted to respond.

MR. SINGER: Is that okay with you?

MS. BLANK: Please, yes, just -- we're done with our questions, I think.

MR. SINGER: Okay. So I do think that the data is an important tool here for the platforms to use to extend into verticals. There's a great piece by Elizabeth Dwoskin in The Washington Post where she discusses how Facebook uses a VPN, called Onavo, to monitor what its users are doing both on and off the platform, and when it determines that you're spending too much time outside of Facebook, it can spot what you're doing and appropriate the functionality and bring it inside the mother ship. So this could certainly distort competition on the edges and

innovation on the edges, and it certainly provides an impetus or a push towards an intervention of some sort, and the question is of what sort.

There is a constituency forming around this notion of data portability, and if I could just quickly, you know, weigh in on that one, you know -- and I know that -- I don't mean to hurt their feelings, because I need support for the Net Tribunal, so maybe we can trade each other's support.

But, you know, they like to invoke the experience of number portability, and I was a big fan -- I have a piece on estimated consumer welfare benefits of number portability -- but I think the prospects of success here are different and less, unfortunately, because in the cell phone space, you didn't need to coordinate with all your friends to make a move; you just got permission to take your number with you, and you went to a rival carrier.

And here I think that there's a very complex coordination problem of everyone in your network kind of moving at the same time to the new platform, and I think for that reason, among others, I'm not as enthusiastic about calling for mandatory data portability.

MS. BLANK: Thank you so much, and I have 20

more questions I could ask on data. This is a great topic, but unfortunately, we are out of time, and I just want to give a huge thank-you to this amazing panel we have had this morning. There are going to be more data discussions, I think, coming up at these hearings in a few weeks. So thank you so much, everyone.

(Applause.)

(End of Panel Number 2.)

PANEL 3: NASCENT COMPETITION: IS THE CURRENT ANALYTICAL FRAMEWORK SUFFICIENT?

MR. SAYYED: Okay, I think we'll get started. We have three panels and two presentations on nascent competition this afternoon to illustrate the importance that the Chairman specifically and the Commission collectively is putting on this issue.

First, we're going to hear from Susan Athey, who was on an earlier panel this morning, and as those of you who were here or were watching earlier, she's Economics of Technology Professor at Stanford's Graduate School of Business. She will do a presentation which will talk a little bit about the incentives business model of the tech firms.

Then we will turn it over to Paul Denis to do a presentation really describing the current analytical framework for analyzing acquisitions of nascent competitors or, arguably, acquisitions occurring in nascent markets.

Once they're both done, we'll have a panel discussion, and I will introduce the panel when we turn to the panel discussion.

As I think everyone knows, if you have questions, you either have a card already or you can signal for a card from some of the FTC staff that's

circulating amongst the room, and it will be passed up to us for possible or even likely inclusion in our discussion.

So with that, I will turn it over to Susan, who will then turn it over to Paul.

MS. ATHEY: Thanks so much for having me here today, and what I would like to do in my remarks is to really connect some of the issues from the morning and the afternoon and talk about some of the reasons that I think they are connected.

One of the main reasons I was concerned about vertical manipulation and sort of vertical integration is that, in fact, that is a nascent competition issue for certain types of platforms. And another theme that I want to continue from the morning is that in order to understand what the role of regulation should be and to understand the welfare consequences of behavior, it's important to first understand the strategies of the firms, because firms are most likely to do something that's a bit of an antitrust risk, as well as potentially harmful for consumer welfare, if they're facing certain kinds of threats. And so understanding what firms would view as really existential threats is sort of a critical input to knowing where we should be concerned or at least to understand what's going on.

So I want to start out just by thinking about how I would talk about this to my business school classes, because that's really, I think, where you start thinking about business strategy and business incentives. And so when I teach about platforms to my business school classes, I start by posing some questions they want to think about.

Are these platforms going to tend towards monopoly? When would you see competition? When are they going to be profitable? And what I'll really want to focus on today is, is it possible for a new startup or a new company to enter and succeed against established incumbents? And, if so, how would you do that?

And if you understand how you would do that, of course, that also flips back to if you were the incumbent -- I always, as an economist, like to take the side of the entrant when teaching my classes -- but, of course, the flip side of the advice for what the entrant should do is what the incumbent should block, and understanding those strategies can help guide policy.

So, you know, we talk a lot about basic platform economics, and the key point there, of course, is the chicken and egg problem. If an entrant's going

to come in and get started, they need to solve that, more buyers, more sellers, more sellers, more buyers, and also the broader types of economies of scale that are incredibly important in tech companies. It's not just, you know, having more data, which is important, but one thing I really like to focus on is learning by doing, the fact that if you're -- one of the benefits of being an incumbent is that you have lots of users, you can experiment and learn from the users what works and use the data, but not just have the historical data of any type, but historical experiments that have allowed you to understand how to make your product better.

When I think about -- you know, I ask questions about market structure and profitability. How do you get started? How do you scale and grow? And, of course, for startups, a lot of times they're actually using platforms initially to get started. Startups that I work with are advertising on Google to acquire their customers initially, and they also have questions about how do you grow from there. Do you expand horizontally or do you go into different verticals?

So to start with, I want to pick an example, and actually Amy Ray also used this example earlier today, but it's one that I think is useful to go back

to from before, you know, the modern tech era, although this was also in a way a tech case. And this is the case of American Airlines and Sabre, and here's a newspaper article from 1982, and it's talking about a Justice Department investigation to see if computerized scheduling and reservation services might have been manipulated to give an advantage to American.

Here's some quotes in that same article from the American CEO. He starts out by saying, "Well, the best guarantee that the Sabre system doesn't advantage American Airlines is that we have to sell them to travel agents. So travel agents buy them. That disciplines us to be fair."

But then he goes on immediately to say, "Well, we're mostly fair, but actually, we advantage American Airlines." So the fact that travel agents choose systems puts some discipline on the system, but not enough to keep them from advantaging American.

And, you know, as -- and then -- and then a final point that he makes is, "Well, we invested in the Sabre system, we built it, so, therefore, we should be allowed to use it to advantage our own airline."

And, of course, anybody who's been following, say, the Google antitrust case will recognize all of these as the same arguments that Google used to talk

about with their vertical manipulation.

So when we think about these cases -- and as an economist, in some ways I think this case feels a little easier because we feel like we have, like, an allergic reaction to somebody not showing customers prices, like that feels immediate and harmful, and we can immediately map that into the impact on prices.

But, in fact, you know, when I think about this case, really the thing that bothers me more about it is the fact that it made it hard for low-cost carriers to come in. So if you know more about the history of this case -- I won't go through all the details today -- but not only did this manipulation soften price competition and mislead consumers, but it also, it was alleged, led to the exit of low-cost airlines because those low-cost airlines weren't able to compete on price and get the traffic away from American.

And, of course, we know that a low-cost airline can enter in some routes, gain scale, and then grow into a larger competitor, and so that using your platform to keep someone from getting a toehold and eventually reducing competition is really what concerns me.

So if I put that in context -- and, of course, as we talked about this morning, there are lots of

things platforms do in the vertical space that are actually good for consumers and in the interest of consumers. So, you know, Walmart ensures suppliers are competitive. Airbnb makes sure that hosts that respond quickly and provide high quality are ranked more highly. Even search engines demote irrelevant ads and don't show them. All of these are things that maybe the advertisers or the suppliers don't like but are to the benefit of consumers, and so those are types of vertical behavior that I might not worry as much about.

So the kinds of things that I'm going to be more concerned about are things that might be really threats to a dominant platform, and so when I started thinking about this, one question I started looking at more than ten years ago was, you know, how can a search engine compete, a general horizontal search engine compete? And so one way that a smaller search engine can compete is to get really good in a narrow category. And, of course, the chicken and egg problem of a platform -- more users, more advertisers, more advertisers, more users -- can actually be solved within a vertical. And so one way you can compete is to get really good at something.

So I was advising Microsoft that they -- they made an -- they went out and found the very best travel

search provider, ITA at the time, integrated that into the back end of Bing, and had better travel services than Google did, which then was allowing them to steal share away from Google in the travel vertical, and the hope was that, from Microsoft's perspective, that that would then allow them to grow and get the consumers to do adjacent verticals.

Now, what happened was Google bought the ITA travel search engine, which ended the Bing relationship, and flipped it to where Google was better in travel than Bing was. And so this is interesting because, you know, first of all, the travel search itself, it could have spawned into something completely distinct and not integrated with either platform, but it also was something that helped a very small -- Bing was around 7 or 8 percent market share at the time, it wasn't called Bing -- it could have helped it grow into a larger general competitor.

And broadly, if you were going to compete with Amazon or compete with Google or compete with eBay in what they do, you know, it would be silly to come in and try to think that you could be better at everything all at once. Instead, generally, you might start in a vertical. And so they recognize those threats and try to make sure that in a vertical, nobody gets too big or

too strong.

Another way that this can play out, which is very related, is that a company, like, say, Amazon, can start out. They're not actually in search at all. They're not in general search. They're just doing shopping. But over time they acquire more users, and then they enter as an ad platform, which then is more of a competitive threat to Google.

So we have to worry about these vertical things because that actually is the entry path. It's really the main viable entry path to compete with a big platform that has more buyers and more sellers. We have to watch for those verticals because they are nascent competitors.

Now, one challenge in making these kinds of antitrust arguments, the Sabre case in some sense would be an easier one to make as an economic expert. You could come in and you could show that consumers were getting different prices, and the harm would be, like, very immediate and apparent.

I think one of the challenges in the policy arena is that, you know, the harm from the vertical manipulation, how am I going to show that if you hadn't put this shopping comparison engine out of business, they might have grown into the next Amazon in, say,

Europe, and then from there, they might have grown into a competitive ad platform? You know, maybe that would have happened, and now we see that it did happen.

When we were talking about it, we didn't know whether Amazon would be successful in advertising, and we still don't know how big it will be. And so as an economic expert, to talk about these longer run impacts I think is really challenging, even though the welfare effects from that are just so much larger than the short-term effects.

Another way that you can enter is to find and get a lot of traffic from intermediaries, and so, again, in search, that was another way that we wanted to get from an unprofitable and never possibly profitable, at 7 percent market share, to something bigger. So you look out and you say, who else has a lot of consumers and maybe I could get those consumers as a block to switch platforms? And, of course, in turn, that's a threat to the incumbent platform.

So just as an example, if Google had not had its own operating system in mobile and hadn't made a deal with the iPhone, we might have seen very different dynamics in the search business. So, say, the mobile phones and mobile operating system, if it makes a search engine a default, can swing very big chunks of

traffic all at the same time, and so that means two things.

First of all, that intermediary that can shift a whole bunch of consumers in a block, risk one is they might shift those to a competitor, and risk two is they are just going to extract all the surplus. So Google has to pay billions of dollars a year to Apple in order to make sure that Google is the search default, and this also can happen with browsers. A very popular browser can put up to auction what's the default search engine and extract a lot of the surplus, and so on.

And then once we understand that, the big risk to firms is any other intermediary who could shift big blocks, take their partners with them to another platform, we can think about the incentives that the platform has to make that not happen. And there's lots of examples of these different -- we call them referring services -- they may not be able to exactly bring their customers with them, but they can shift customers from one platform to the other, and they typically have a lot of power and are also potentially very ripe for vertical integration that may or may not be beneficial.

Now, another big theme that's important is that when we think about all the things that a company can

do to try to in the face of a potential threat, what we would like a company to do when they're faced with a threat from a new entrant is to make a better service or -- you know, and if it's a vertical competitor, they might say, ah, if I'm worried that shopping is going to be really big, I am going to make my own shopping, and it's going to be really awesome, and even if I don't manipulate, everybody's going to use my awesome shopping service. That's one, like, welfare-enhancing thing you might do.

Another welfare-enhancing thing you might do is just make your search engine or your platform even better, so that even if that shopping engine gets big, people still want to use your main central platform. But there's also things that you might do that are welfare-harming, like make or buy an adequate vertical service and then promote it and advantage it to take away customers from the competing vertical service, make sure that you own that thing, so that you've now squashed the nascent threat of a shopping entrant getting big and actually ultimately turning into a horizontal competitor.

And I think these types of things are particularly harmful if they're innovative services, scale-driven services, or services with network

effects. So, you know, things like ad-driven news media or review websites -- these are all examples of things that can really harm and, therefore, never get the chance to grow into something that might become a more horizontal competitor.

Now, this type of thing also happens in other types of contexts as well. So we haven't talked a lot about ad tech today, and it's actually kind of hard to talk about because there's so much jargon and it's really complicated, but just as an example, we can think about what's a way that someone might enter and compete in ad exchanges?

Well, if you have two advertising exchanges, where publishers and advertisers buy and sell ads, what a smaller ad exchange might hope is that they can get advertisers and publishers to multihome, and that might give them a chance to grow into a larger ad exchange and a more effective competitor.

And when you think from the publisher's side of this market, it's actually like, in principle, pretty tough competition, because the ad exchanges are giving the publishers money. So that's, like, perfect substitutes -- it's just which ad exchange is going to give me more money.

So if there's two equally sized ad exchanges,

all the revenue should go to the publishers, because, you know, I am going to -- one exchange says I'll give you this many cents per impression, and then the other publisher says I'll give you a little bit more, and they would cut out their take rate and have to give all the surplus to the publishers, or else the publishers would just go to the other ad exchange.

So it's really scary, if you're a big ad exchange, to worry about a smaller ad exchange growing, because if they get to the -- if they're equally sized, this is kind of a zero profit business basically. You have to give all the revenue to the publishers.

Is that my time? Yep. So let me finish my thought here.

So in order to prevent that type of growth, you can use something like a tool, a software tool, that helps people compare across ad exchanges, and if it's vertically integrated, those tools can actually advantage one ad exchange over the other. And so in particular -- this particular practice was ended in 2017 -- the software would basically collect the bids from all the other ad exchanges and then give Google a chance to come in at the end and outbid the others just by a penny and get the traffic, which prevented the smaller nascent competitor from growing.

So the big theme is that in these types of markets, we have to look at what are the tactics that are used to try to keep the nascent competitors from growing and be very cautious about all the different things that you can do.

So I'm out of time, but I just will highlight that the ways that you compete with different services really are different from business to business, and the way that a nascent competitor will compete against a social network may be different than how it competes in a search engine or an operating system or e-commerce.

And so for each of these industries, you need to first think about the business strategy of how a nascent competitor comes in, and then look for exclusionary conduct or other types of squashing or integrations or acquisitions that stop the particularly threatening path.

Thank you.

MR. SAYYED: So Paul Denis will talk a little bit about the current analytical framework. I neglected to mention that Paul is a partner at Dechert. He was principal drafter of the 1992 Merger Guidelines, and the relevance of that may be clear as he speaks. And Paul is the developer of DAMITT, which really analyzes how long it takes for the agencies to clear

large, complicated merger transactions.

MR. DENIS: Thank you, Bilal. Thank you for the opportunity to be part of this conference. A tough act to follow, Susan. A fascinating presentation. Mine will be much more prosaic, focusing on the legal framework, but Susan has set it up well in giving you some context for the type of problems that we've devised these legal frameworks to handle.

I will focus on the acquisition context. I'll stay away from, you know, the issues of predation, vertical. It will be difficult enough in the time available to get through just talking about the analytical frameworks we have in place for analyzing mergers that involve nascent potential competition issues.

If you're a believer in fate, you might actually think I was fated to do this presentation. In the fall of 1982, I was in Ann Arbor, halfway through a course of study in law and economics, and despite having just finished a lucrative summer clerkship at a big law firm, I needed money. I needed a part-time job.

We had a visiting professor in that fall, a guy named Joe Bradley, and he was going to teach my antitrust class. So I figured he must be trying to

write some papers, maybe he needs a research assistant, I should go see him about a job.

So I went to see him, and I didn't know much about Joe Bradley at the time, but if I had done even a modicum of research, I would have learned that he had written the seminal article on what was called The Potential Competition Doctrine. It was an 89-page, 300 some-odd footnote tome in the Yale Law Journal, with the cumbersome title of Potential Competition Mergers: A Structural Synthesis. It was a mouthful.

But as fate would have it, he was working on another article. He had been asked to contribute to a California Law Symposium on mergers under the then brand new 1982 Merger Guidelines, and his topic was, not surprisingly, potential competition mergers. I'm not sure that he really needed a research assistant to help him with that, but he hired me. What was supposed to be a job turned into a paid tutorial for which I was the principal beneficiary.

With my short-term cash flow problem in check, I started thinking maybe I need another job next summer, so I, you know, proudly put on my résumé that I was the research assistant for the distinguished professor Joe Bradley, working on this important article on potential competition mergers, and I signed

up for a bunch of interviews with law firms that were doing what I thought was important antitrust work.

One of the firms I targeted, Skadden, sent two interviewers to campus, and one was a tax lawyer and one was an antitrust lawyer. Somehow, by luck or design, I ended up on the list with the antitrust guy. It turned out that was Bill Pelster, who had just tried the Grand Union case, one of the FTC's most important potential competition decisions.

By the time I interviewed with Bill, I knew a little bit about the potential competition doctrine, not a great deal. It was a good thing I did, because he spent the whole interview telling war stories about the case and drilling me on various aspects of the doctrine. So Joe Bradley saved me there. Bill never really interviewed me, but he managed to get me a job anyways, so...

I had the benefit of working with Bill and a number of other extraordinary colleagues, including a guy who was just about my age, who I think all of you know, who is Joe Simons, now our FTC chairman, a great group of people.

So why do I tell you these stories? Well, I tell them in part because I thought I could get away with it before Bilal would give me the hook, and I

could honor some people who I think were important in my career, but I tell you these stories because they illustrate what I think is a central point that we need to focus on this afternoon in these hearings.

That is, you know, these concepts of nascent and potential competition really are pervasive in U.S. antitrust merger law and merger enforcement practice. It's something well embedded in our legal framework, and the panels that are going to follow, you know, will debate the efficacy of some of those frameworks, but I don't think there's any debating that these concepts are well entrenched into our antitrust thinking.

I'll set the stage for the panel discussion by outlining really just at a high level what some of these concepts are, but first, before delving into that, we will touch on some definitional issues so that we can hopefully make the discussion a little bit more tractable. Then after reviewing the framework, I'll offer a couple thoughts on ways in which the framework might be filled out, and the panel discussion will allow us to dig into those issues and others in more detail.

So the terminology in this area is to say not the greatest. Some of the terminology is not well defined. Some of it is well defined but is defined in

ways that most users do not find to be intuitive at all. "Nascent competition" doesn't really have a formal legal definition. The word itself implies some degree of competition that's present but maybe not yet fully realized. In common usage, the term "nascent competition" is sometimes used to refer to competition that we've yet to see. I think that's incorrect and concede to falling into that usage at times myself.

So my suggestion for this afternoon is that we try to focus on "nascent competition" being limited to competition that's presently being felt but not yet fully realized. Used in this sense, the acquisition of a nascent competitor by one of its rivals would be seen as extinguishing not only current competition between those firms but also either extinguishing or perhaps amplifying the prospect for greater competition in the future.

The term "potential competition," by contrast, really is well defined in the law. The courts have spent a considerable amount of time parsing what's called the potential competition doctrine, and they developed a bifurcated concept of potential competition, distinguishing between "perceived potential competition" on the one hand and "actual potential competition" on the other hand.

The essence of these two types of competition is not immediately obvious from their names, so we'll spend just a minute focusing on, you know, what the courts have left us in this area. "Perceived potential competition" is focused on the present competitive effect that's thought to result from an incumbent's perceptions about the prospects for future entry. The acquisition of a perceived potential entrant, therefore, is thought to lead to a reduction in current competition as that constraint that's being imposed by the threat of future entry is eliminated.

So the potential for the acquisition to increase competition through the realization of synergies or otherwise is really not part of the perceived potential competition doctrine, but as we'll discuss over the course of the afternoon, it remains part of the standard antitrust merger analysis.

"Actual potential competition," by contrast, is focused on the future competitive effect that's thought to result from future entry. Don't ask me why they call it "actual," though. The acquisition of an actual potential entrant doesn't change current competition in any way, but it's seen as a matter of concern because it eliminates the increase in future competition that's expected to result from that future entry.

As with the perceived potential competition, the prospect of increased competition from the merger is not part of the doctrine, but it remains part of the analysis in practice and part of our discussion.

So as I said, these definitions are not intuitive to most people, they probably aren't intuitive to you, they never were to me, but that's what the courts have given us, and my suggestion is that we use that as our guide for this afternoon so that we don't find ourselves talking past each other.

As I noted at the outset, these issues really are pervasive throughout the analysis. The impact of nascent and potential competition really begins at the very first steps of merger analysis, when we determine the base price to which we're going to apply the so-called SSNIP, the small but significant nontransitory increase in price that's applied in the hypothetical monopolist paradigm.

It continues through the identification of market participants, the assignment of market shares, and measurement of market concentration. In defining the competitive effect of concern, that's where we are most profoundly influenced by notions of nascent potential competition. It's here where antitrust merger analysis takes us into issues like the potential

competition doctrine, but it was dissatisfaction with that potential competition doctrine that led to the development of other alternatives to the traditional market definition, that were thought of perhaps being better ways of incorporating concepts of nascent and potential competition into the analysis. We can talk about how well we have done with those. Those are things like "innovation markets" or "technology markets" or "R&D markets."

Entry analysis, of course, is inherently about potential competition, as is efficiency analysis, and efficiency analysis doesn't even make the page here, reflecting the short-shrift it usually gets in merger analysis, but it most assuredly is a part of the consideration of the impact of nascent potential competition.

The treatment of efficiencies and other forms of dynamic -- what I call dynamic response, such as rapid entry or committed entry, raises a point of practical application that, you know, I believe warrants further discussion this afternoon. While guidelines and analytical frameworks, you know, generally purport to be burden-free and try to avoid giving you relative weights of evidence, there has been a decided drift in how we look at these issues.

It's been a drift in the direction of what I regard as somewhat asymmetric treatment of potential competition and nascent competition, and that drift was reflected first in the 2006 DOJ and FTC commentary on the Merger Guidelines, and later in the agency's revision of the 2010 Guidelines.

I think the agencies are properly focused on protecting nascent and potential competition. It is something that warrants protection. The panel discussion will explore the appropriate scope of that protection, but it is certainly warranted in some circumstances.

Where there's been a decided reluctance has been in recognizing or at least fully crediting nascent potential competition as market forces that can be relied upon to ensure continued competitive performance in markets that are affected by mergers among incumbent firms, firms that are well established in the market and that are not either nascent or potential competitors.

So as the agencies sharpen their focus on nascent and potential competition, my suggestion is that the burdens of proof and evidentiary standards that are imposed on that analysis be imposed in a symmetric way, so that we're equally likely to consider

and recognize and credit a nascent or potential competitor as a market participant as we are to look at it as a market force of interest in, you know, traditional horizontal merger analysis.

Having introduced the primary ways in which the issues of nascent and potential competition analysis affect our merger analysis, let me go into each of them in a little bit more detail and then go into how the framework might be filled out a bit.

So in implementing the hypothetical monopolist paradigm, the agencies typically apply the SSNIP to the current market price, but nascent and potential competition in a market may mean that future prices are going to be quite different than current market prices, and it may mean that we can reliably predict those prices to be at a lower level.

The guidelines recognize this effect and suggest that in those circumstances that anticipated future prices be used for applying the SSNIP. So all other things equal, using these lower anticipated future prices will lead to a definition of more narrow markets, the identification of fewer market participants, and the recognition of fewer other entrants. This is just one way in which nascent and potential competition is slipping into the analysis

that most people may not be paying attention to.

In the identification of market participants, you know, separate and apart from treatment of the benchmark price, the Guidelines are recognizing that market participants are not limited to firms that are currently producing and selling the relevant product, right? The Guidelines explicitly recognize that new entrants, firms that are committed to entering but haven't done so, will be counted as market participants, all right?

They will also include so-called rapid entrants, firms that are expected to be likely to respond to noncompetitive performance by supply responses that don't involve the expenditure of significant sunk costs. Those firms will also be counted as market participants. So the Guidelines are already looking at a number of these nascent and potential competitors and thinking about ways to include them in the analysis. In some sense, the Guidelines have converted horizontal merger analysis, so they're just subsuming some aspects of what we call potential competition analysis.

Both these new entrants and these rapid entrants look and feel a lot like so-called actual potential entrants, which is why I suggest that, you

know, horizontal merger analysis has subsumed a great deal of what was previously thought of as a separate doctrine. It's become an issue, an objective test really, of the timing, the likelihood, and the sunk costs associated with their entry.

So even after these market participants have been identified, nascent and potential competition issues come into play in how we assign market shares. The shares of the incumbent firms may be discounted based on reliable predictions of the impact of nascent and potential competition, and because shares is a zero sum game, then some portion of the share has to be attributed to those nascent and potential competitors.

Use of projected shares necessarily affects the measurement of market concentration, because market concentration is itself a function of share. But even if there's not some quantitative adjustment in shares, and, therefore, some quantitative adjustment in concentration, the Guidelines recognize that there is a significant qualitative difference in the analysis when an incumbent proposes to acquire a potential entrant.

In practice, you know, we see a comparable adjustment made in analyzing the merger of an incumbent firm with a nascent competitor. Particularly when we're looking at coordinated effects analysis, the

nascent competitor is likely to be regarded as a so-called maverick, but defining the competitive effect of concern, as I suggested earlier, really is the hotbed for the inclusion of nascent and potential competition issues into our analysis, and this is felt in horizontal merger analysis, in potential competition analysis, you know, and in vertical analysis.

In horizontal analysis, most often we talk about price effects. The Guidelines go beyond price effects because nascent and potential competitors may affect product quality, may affect product variety, and may affect the level of innovation in the relevant market. I've grouped all these together as output effects because output really is the best way of measuring what's going on, particularly when you have price and quantity moving simultaneously.

The Guidelines have also, you know, explicitly focused on innovation effects as a competitive effect of concern. These innovation effects are increasingly the focus of the agencies in practice. What innovation effects are of concern? There's a concern about the reduced incentive to continue innovations that may be started by the acquired firm, the reduced incentive to initiate development of new products, but there's also, you know, potentially an increased incentive and

ability to innovate that might derive from the combination of complementary capabilities between the incumbent firm and the nascent or potential entrant. The Guidelines recognize this as well and take it into account in an efficiencies analysis.

Here again, this asymmetry issue that I mentioned earlier comes into play, with agency practice seeming to reflect an expectation that reduced innovation incentives are the more likely outcome resulting from mergers, rather than an increase in innovation. The source of this asymmetry is perplexing to me, because despite all the focus on innovation, we do not have a generally applicable theory of innovation that links innovation to mergers or links innovation to market structure.

Economists have written countless models that attempt to predict innovation, and within the confines of the assumptions of those models, they work, but determining which of these countless models to apply in a given real world situation, where the real world situation doesn't conform to the assumption of any of the models precisely, remains a dark art at best.

The potential competition doctrine is perhaps, you know, the most focused embodiment of these issues in merger analysis in the U.S. Over the years, the

courts and the Commission have imposed significant but appropriate evidentiary requirements on making out a case under the potential competition doctrine. I think that those requirements reflect, you know, considerable uncertainty we all have over how reliably we can look forward and predict what's going to happen in the future.

While the Supreme Court's accepted the notion that perceived potential competition states a claim under Section 7, they've twice reserved on this issue when thinking about the actual potential competition doctrine. I think that's simply the inherent conservatism of the Court, addressing only issues they absolutely have to address, and not dealing with other issues that they can duck.

Section 7, after all, is focused on whether the acquisition is likely substantially to lessen competition, but left unstated in the statute is lessened competition relative to what? In practice, we have all filled in the answer there, and it's lessened competition relative to what would happen absent the acquisition. So this counterfactual is inherently forward-looking, requires us to consider what competition would be in the future, both with and without the acquisition.

So just as General Dynamics teaches that we have to consider factors that can reliably be said to predict, you know, diminished future competitive significance for incumbents, we need to apply the same sort of thinking to nascent and potential competition and ask where we can reliably predict what the future effects of nascent and potential competitors might be. Again, this symmetry problem comes into play, and, how you know, our going-in biases affect how we look at that issue on each side.

I'm running well past my time here, but we will try to wrap this up.

MR. SAYYED: You can keep going.

MR. DENIS: The perceived potential competition doctrine, three primary elements here, market structure, uniqueness, and effect, right? The market has to be structured in such a way that entry likely would have a procompetitive effect. Normally we look at concentration as being the indicator there.

Uniqueness is a second requirement. This acquired company, the potential entrant, has to be one of few comparable potential entrants.

And, finally, an effect, the prospect of entry by this firm has to actually have an effect that alters incumbent behavior in some procompetitive sort of way.

The actual and potential competition shares the first two elements with the perceived potential competition doctrine, market structure and uniqueness, but adds two others, right? The actual potential entrant actually has to have a plan, right? There has to be a subjective intent to enter, and objectively, the trier of fact has to conclude that they have the capacity to enter.

Finally, that entry has to be likely. You know, the Commission's B.A.T. decision is probably one of the more focused opinions on this point, and on the likelihood requirement, the Commission applied an elevated standard of proof. There had to be clear proof that entry was, in fact, likely.

So because those elements of proof were difficult for plaintiffs, there arose a number of alternative doctrines to try to get around the potential competition doctrine yet incorporate concepts of nascent and potential competition into the analysis. You know, they are themselves innovations. These are the concepts in innovation markets, technology markets, and R&D markets. Given where we are on time, we will leave the details of these to discussion on the panels.

So filling out the framework, where do we need to go with this? We have a well-developed framework.

It's been applied for years. We'll talk about how well it's been applied, but there certainly are points that could be filled out a bit.

The empirical foundation is probably the first and most obvious. To use the term that Chairman Simons has used, you know, we have limited, empirically grounded economic analysis on the effects of nascent and potential competition, and this is certainly an area of research to the extent we have professors in the room. We encourage your best and brightest graduate students to pursue this.

Part of getting there may be by doing more in the way of retrospective analysis. The Commission has certainly pioneered these efforts in the past. We have a much greater need for retrospective analysis of our predictive tools in this area than in other areas. This is not a real damning criticism of this area of the law, and it's true throughout what we do in merger analysis. We have a number of tools that we use that we haven't quite tested out yet.

When we think about upward pricing pressure, where we spend a considerable amount of time without having any strong evidentiary foundation for knowing that upward pricing pressure theory is actually predictive of what's going to happen in mergers. We

have some reasonably good empirical evidence that it's not predictive. So this is an area where actual nascent and potential competition, you know, shares a weakness with horizontal merger analysis, and, you know, a little more in the way of retrospective analysis and testing of our predictive tools is in order.

Probability, we're talking about two things that are inherently probabilistic events, you know, a nascent competitor becoming, you know, more competitive in the future, a potential entrant coming into a market in the future. These things are not black and white. They may happen, they may not, and we don't have a generally accepted threshold of what the probability of success must be before we need to protect this nascent and potential competition or before we recognize it as a market force in looking at horizontal merger analysis.

I think we need one, and there actually may be a bit of an implicit one that the Commission has already adopted. For those of you who are familiar with DAMITT, which I mentioned earlier, the Dechert Antitrust Merger Investigation Timing Tracker, you know at our firm we have a habit of digging into what the agency's actually doing to try to infer what's going on

behind the curtain of nonpublic investigations. So with the help of my colleague, Konsta Medvedovsky, we took a look at the Commission's enforcement practice in pharmaceutical mergers to see whether that might tell us a little something about, you know, what is the probability of success that you have to have before you're really going to count these nascent and potential competitors.

And, you know, we can talk later about the details of this, but our preliminary view suggested that the answer might be something north of 60 percent, and we get there by looking at the Commission's enforcement practice involving pipeline branded pharmaceutical products, but certainly when you look at the pharmaceutical area -- and Mike Moiseyev's here and he knows this better than anybody -- the Commission has considerable experience, has a well-developed reputation for thoughtful enforcement in this area, and does not go chasing after low probability events.

The last point here is the temporal dimension of the analysis. You know, we don't have clear guidance on the time frame. If you remember back to the '92 Guidelines, we used to talk about supply responses occurring within a year in response to a SSNIP that lasted a year. We talked about entry

occurring within two years from initial planning to significant market impact.

But in the 2010 Guidelines, we moved away from bright-line tests towards something that was far more nebulous. We talked about whether rapid entrants would occur in the near future, and we talked about whether committed entry would be rapid enough, whatever "rapid enough" happened to mean.

So we've kind of lost track of, you know, a firm temporal dimension for anchoring our consideration of nascent and potential competition. That's something that I think will need to be revisited in order to give us a little more clarity about how these doctrines are going to be applied when it comes to platform acquisitions and other related concepts.

So just to sum up, I think we have an analytical framework in the U.S. that, you know, provides fairly rich consideration of nascent and potential competition issues. How well it's considered is something that I hope you'll join us in discussing in the panel discussions to follow.

MR. SAYYED: Thank you, Paul.

So I will now introduce the panel. Each member of the panel will give some opening remarks, and then I think we'll focus on, you know, how robust, how

complete, how sufficient is this analytical framework that Paul laid out and potentially offer alternatives or additional considerations that the agency needs to take account of.

So I've already introduced Susan and Paul. Lina Khan is on the panel. She is presently a Fellow at Columbia University Law School.

John Newman is an Assistant Professor at the University of Memphis School of Law.

Bill Rogerson is the Charles and Emma Morrison Professor of Economics at Northwestern University.

Steve Tadelis, who has been on a panel earlier in this three-day set of hearings, is a Professor of Economics, Business, and Public Policy at the University of California, Berkeley, Haas School of Business.

And Will Tom is a partner at Morgan Lewis.

There is more information in their bios or background on the web.

Right now I'll turn it over to Lina to begin. We will go right down the row. We will give Susan and Paul a chance to respond, and then we will have each panelist respond to each other. And, of course, we'll take some questions from the audience.

MS. KHAN: Great, thank you. Thank you to the

FTC for inviting me and to OPP for putting these together. I know it's taken a lot of work.

So I am going to discuss potential competition in the context of digital markets, specifically discussing how safeguarding potential competition in these markets is especially important. There's been significant debate in the last few years about the growing dominance of a small number of tech platforms and the role they now play as key arteries of commerce and communications.

I think a key fissure in that debate is whether any of the dominant platforms are already using their dominance in ways that undermine competition such that it should be within the purview of the antitrust laws. I think wherever you fall within that debate, steps taken by these firms to solidify their positions through eliminating future challengers should pose a huge concern to everybody.

That is, even if you believe that the current dominance of these firms is nothing to worry about because we're going to see the, you know, inexorable forces of creative destruction swoop in and dislodge their dominance, that can only be true if tomorrow's innovators are not blocked by today's incumbents.

So in light of this, I think preventing mergers

that entrench the positions of leading incumbent tech firms by eliminating future challengers should be a key priority for the antitrust agencies. When thinking about potential competition challenges, I think there are a few areas that deserve significant attention.

One is entry barriers. So entry barriers are important to this analysis because, as we heard from Paul, the potential competition framework includes an analysis of whether there are some limits on the entrants that are positioned to enter. In digital markets, data and analytics capabilities can be a significant barrier to entry.

Some would argue that aggregation of data does not pose a competition problem because data are nonrivalous, but I think in practice, data that is significant for competition purposes might be costly and difficult to obtain, so there's going to be little incentive to share.

This is not new to the FTC. The FTC recognized that data can serve as a significant entry barrier, so in the Nielsen-Arbitron case, it determined that proprietary data held by the firms would be key inputs for downstream services that were still nascent, and the consent order included divestiture of certain data assets.

I think another reason that it's important to consider the role of data as a barrier is that data advantages can be self-reinforcing, which means that for a new entrant, gathering enough data can test an incumbent, will be a significant challenge.

So what does this mean for potential competition analysis? I think the fact that data does serve as an entry barrier suggests that in many digital markets, there will be a significant limit on the potential entrants, which is what renders potential competition analysis so salient, and by extension of that, because potential competitors are less likely to emerge, it is especially crucial that when they do emerge, antitrust safeguards that potential competition.

So, the second challenge is what I call the Onavo problem. So Onavo is a company that Facebook acquired in 2013. It's a VPN provider that grants users heightened security, but it also allows Facebook to track in extremely close detail which rival apps are diverting attention from Facebook, which means that Facebook can detect, at the very earliest stages of a company's growth, which competing apps might pose competitive threats.

This information then shapes Facebook's

acquisition strategy and enables it to purchase apps at very early stages, such as tbh and Moves, which are presumably identified as quickly growing. So Onavo is one example of the significant information symmetries that exist between platforming intermediaries and enforcers or who in the competitive significance of a deal may be less obvious if it doesn't have access to the same granular information about the usage level of rival apps.

And so I think this means that agencies should be more willing to issue second requests for even seemingly small acquisitions and then make sure that information collected in second requests include competitive intelligence gathered through devices like Onavo.

I think it also means that there may be acquisitions that don't significantly undermine competition in the relevant market but that do structurally position the incumbent to detect nascent rivals much earlier, information that they can then go out and use to make early acquisitions. And so I think these acquisitions that don't affect the relevant market but do structurally improve the position of an incumbent to make early acquisitions is something that should also be relevant to the agencies.

I want to quickly address two arguments that are sometimes made to caution against aggressive enforcement in these markets. So one is the idea that there's a risk of short-term, immediate consumer harm, given that an incumbent that acquires a startup may offer the quickest path to market. I think it's a very reasonable consideration.

I think business literature and experience suggests that while incumbents may be more successful at delivering innovation that continues on established research paths, it's really the startups and the new firms that are more likely to account for the truly breakthrough, paradigm-shifting innovations. This is for at least two reasons.

One is that incumbents may not be eager to invest in innovations that are likely to lose them value on their existing investments, and the second is that even in instances when it's incumbents that are making the breakthroughs in innovations, in order for them to do that, they need some outside competitive pressure. So even if there is some short-term consumer harm here, I think we need to be careful about weighing that against the long-term gains in innovation.

The second argument that's sometimes made is that aggressive enforcement could result in a negative

effect on the capital markets for startups. If acquisition by an incumbent is an exit strategy that's motivating startup funding, then limiting these acquisitions could lead to fewer startups. I think that's also a very fair argument, but it's somewhat incomplete.

I think new research by Ian Hathaway and Hal Singer shows that venture capital, first financing, and seed stage activity is contracting more rapidly or growing more slowly in sectors where, say, Facebook and Google and Amazon are likely to enter, corroborating the kill zone story that we have heard reported other places. So I think concerns about declines in venture capital are very legitimate, but so far there are other sources of that decline.

And I guess I'll close by identifying a few paths forward for the agencies that could help address concerns about potential competition. So one is, as Paul also mentioned, more merger retrospectives. Merger enforcement, of course, is rife with uncertainty, and as merger enforcement has become more fact-specific, oftentimes the information that's most relevant won't be available for a few years after the merger has been consummated, and if that's the case, I think it makes sense to do more merger retrospectives

to identify when acquisitions did, in fact, stifle important competition and learn from that and consider undoing those mergers.

And the second is to review acquisitions by monopolistic firms as potential Section 2 violations, and so this is something that Former Commissioner McSweeney also proposed, and there's precedent for this. So in 2017, the FTC challenged the Mallinckrodt ARD's acquisition of certain assets from Novartis under Section 2 on the theory that this acquisition was a defensive move to extinguish a nascent competitive threat to its monopoly. The settlement, therefore, involved a license to third parties to develop the relevant assets.

And so this didn't involve a digital market, but I think it is a good model for how the agencies might consider evaluating acquisitions by dominant firms. So I'll close there. I think generally, you know, antitrust has been haunted by this fear of false-positives, and I think in the context of potential competition, we should be rebalancing towards more comfort with false-positives with a recognition that oftentimes that's necessary in order to prevent false-negatives. So I will leave it there.

MR. SAYYED: Okay. Thank you, Lina. You can

applaud. I didn't mean to get in the way of you applauding. Thank you.

We'll turn to John now.

MR. NEWMAN: All right. So I'm going to start off by making a claim that I think would have been really uncontroversial five years ago. It's starting to feel a little risque, though, these days, and that is that our current basic legal framework, at least as applied to sort of core issues like horizontal mergers and acquisitions, is not totally broken.

So how do I base that claim? I'd say that we can look at the types of cases the agencies have been bringing. I'm going to focus on digital markets since a lot of the talk about nascent competition has to do with digital spaces.

The agencies have been bringing a surprisingly broad variety of cases, different types of cases in different digital markets, along a spectrum, right? So you had FanDuel-DraftKings, where there were two actual competitors that were merging. You had CDK-Automate, where you had an actual rival merging with a sort of nascent rival. And then you had Nielsen-Arbitron, which was a combination of two potential competitors, neither of which competed in the relevant market of concern at the time of the challenge.

None of these cases attracted a deluge of criticism, so to me that tells me two things. The agency is being active and they're not making egregious mistakes. So if the basic, basic legal framework seems to be functioning fairly well, are there nonetheless some sorts of areas that are voids in the current enforcement regime? And another way to put that question is to say, what's prompting all the calls that we're seeing for stronger antitrust enforcement in digital markets?

To me, there is a big gaping void in the current framework, and that has to do with zero price markets. So none of those cases I just mentioned involved zero price markets, despite the near ubiquity of that model at least with consumer-facing platforms. So none of these cases involved a zero price market.

A lot of people have responded to that void in enforcement by urging a focus on data extraction or big data. To me, that's misguided for a bunch of reasons, the biggest of which, though, is that data extraction is just a really messy thing from a consumer perspective. So a lot of data extraction, when it's used internally by a firm to improve the product, is good for consumers. The concerning usage -- that is, you know, extracting data and then selling it to third

parties who then target consumers with advertisements or using it to target advertisements -- that really reflects derived demand.

So the demand for data here is derived from the demand for advertising, right, the demand for attention. So to me the core area of concern and where there seems to be a void in current enforcement structures and efforts lies around attention markets, attention competition.

So my proposal is that where we see acquisitions of direct rivals, even if they're nascent, we should be looking harder to protect attention rivalry. Cases in the past that seem to, in retrospect, maybe represent false-negatives would include mergers like Facebook-Instagram, Google-Ways, Zillow-Trulia, cases where attention rivalry is at the core of the merger.

So that immediately runs into, I think, a laundry list of objections. A couple of them were ably addressed by Lina. A couple more, objection number one -- and I'll see if I can respond to this -- so all digital firms compete for our eyeballs, so they all operate, from an attention perspective, in one big market that's really unconcentrated. I think that totally misses the mark.

So attention is the currency in these markets. So the objection is essentially the exact equivalent of saying all firms compete for money, so there must be one big market that's really unconcentrated, which is laughable.

The second objection, we already look at harm to innovation on the user side, the zero price side, the attention rivalry side of a lot of platforms. This is true or it seems to be true, at least, if you look at something like Zillow-Trulia. The agency reported that it looked for harm to innovation on the user side of the platform. Is that enough, though? Is that sufficient to allay all concerns or find all concerns?

I don't think so. Unfortunately, we don't have, as we've heard today, a really strong economic theory or econometric tools that we can use to assess innovation effects in a merger context, and to sort of worsen the problem, the qualitative evidence that we would usually rely on in the absence of a nice economic theory is not likely going to be there.

So if we think about what we'd be looking for, it would be maybe a board presentation, right, where a CEO is trying to sell an acquisition to the board by saying, oh, after the merger, we're not going to innovate anymore; never going to happen. So the types

of qualitative evidence we would need isn't going to be there, I think, in a lot of cases. So focusing solely on harm to innovation in these contexts is not going to be enough to catch all the potential anticompetitive effects.

Finally, I think -- and this is maybe the most salient or the most trenchant criticism of the idea of regulating attention markets in a more interventionist way -- is that market definition, market effects are going to be really hard to measure here, right? We lack prices, and that's our favorite tool to use.

Here I think there actually will be useful qualitative evidence that we could use. So if you go back and look at investor statements from Zillow-Trulia, to use one example, post-acquisition, you've got the CEO of Zillow Group saying, in an investor call, a publicly available call, that now we've got 70-plus percent of the market for online real estate portals. That's pretty compelling, and it's qualitative, right? But it's pretty compelling stuff, and if that's the kind of stuff that's available publicly, one can only imagine what's being said internally.

Second, quantitative evidence, and here's where I would like to sort of urge the FTC to look harder in

a specific way. With digital firms in particular, there is often a great deal of AB testing that goes on in the marketplaces, really easy to do that in a digital market. To the extent that the FTC could ask for the results of AB testing when firms are changing advertising loads, and looking at the competitive results of that, I think that would be a fantastic idea and would help give us an idea of what happens in a digital market when a dominant firm increases advertising loads to users. Where does that substitution go to? And it could be a really useful tool for us to use.

MR. SAYYED: Okay. Thank you, John.

We will turn to Bill Rogerson now.

MR. ROGERSON: Great. Well, thank you very much for having me here today, and thanks for doing such a great job organizing this very timely conference.

My understanding is the first panel is supposed to focus on two questions. First, what framework should we use to evaluate mergers between incumbents and nascent competitors in high-tech industry? And second, is the current law and the current version of the Merger Guidelines consistent with using the correct framework, or would the law or the Guidelines have to

be changed or altered in order to use the correct framework?

I'm going to focus more on the first question of what the correct framework should be because I think this is a question that economics can shed the most light on, and I'm an economist; however, let me very briefly say, regarding the second question, that I agree with a lot of what has been said earlier, that I view the law and the Merger Guidelines as relatively general statements, flexible general statements of general principles that are pretty sensible, and my own nonlawyer view of it is that one could interpret existing law and the existing Merger Guidelines as being completely consistent with a sensible and correct welfare analysis of the problem. So I don't think there's any need to change the law or even to change the Merger Guidelines. I think all the right principles are in place.

If I was on the next panel that's supposed to address should we get a little tougher on any mergers or have we been looking at these mergers as carefully as we ought to using the correct framework, I'd probably say, given the events I've seen in the last five years, looking back on them, that possibly regulators should be a little tougher or look more

closely at a number of mergers, and perhaps there have been a number of mergers that have been approved that, at least in retrospect, with hindsight, one wonders why they were approved or whether they really should have been or whether there was enough evidence at the time to decide that perhaps that they shouldn't go forward with, but I don't think there's really any need for a change in the law, and I think the basic elements of the correct framework are in place.

What I'm going to do today is focus on one specific issue related to what the right approach is, and what I'm going to do is describe two different social welfare problems that we could attempt to solve when we were choosing a policy on how to evaluate these types of mergers, all right?

The first policy is going to be not quite correct and be extremely complicated. The second policy is going to be exactly correct and fantastically more complicated than the extremely complicated policy. And one message I want to leave you with today is, is that I wonder whether or not we should be considering using the not quite correct policy because it's a type of welfare evaluation, although it's extremely complicated, and I could imagine evidence being brought to it and evaluated, whereas the second perfectly

correct question I'm not so sure this is the case.

Okay. So let me start, just as a benchmark, with describing what I think the standard competition problem is when two mature firms come to the DOJ or the FTC and say we'd like to merge, okay? Because there -- you know, and, of course, we really just look at the competitive -- try and assess the competitive effects of the merger, to see to what extent it would cause -- competition would be reduced and price would go up, quality would go down, or perhaps even look at innovation effects, on the one hand, and then on the other hand, ask if there are compensating efficiencies, and try and do some sensible analysis, as best we can, to predict whether or not consumer welfare would be higher or lower with the merger, okay?

Now, what changes when one mature firm and a nascent competitor come to the agencies and say we'd like to merge? So we have a big incumbent who wants to merge with a startup that has created a new idea, so it's already been in the market for a while, thinking, doing innovation. It's created the idea for a new product, and perhaps it's already begun to introduce it to the market, but there's still a lot of uncertainty.

Maybe the product is still going to evolve. It isn't quite clear how consumers will use it or how many

consumers will want to use it or whether they'll view it as a substitute for the incumbent's product or not or to what extent they'll view it as a substitute. So there's a huge amount of uncertainty about exactly how this nascent product will fit into the market.

Well, I think there are two different welfare problems you could consider when you are asking should we approve this merger, okay? The first one I'm going to call "the ex post problem," and the reason I call it the ex post problem is I'm going to say let's take as given that we have that startup today who's already done all of the startup innovation that he did. He's already come up with a new idea, tried it out a little bit in practice, and he's ready to go, or, you know, he's nascent, but he's done a lot of work already. He's already done this preliminary innovation, okay?

Well, at that point, taking that as given, the competition problem we're looking at with the mature firm and the nascent firm is very similar to the problem we look at with two mature firms, only there's a lot more uncertainty about exactly what the competitive effects are and what the nature of the efficiencies are, right? But in principle, it's the same type of problem. We've got two firms. We want to assess the competitive effects. It's going to be

harder to do this because it's more forward-looking, relying on more predictions. We're not quite sure if the start up -- you know, number one, would the startup succeed if it was by itself, or really has it only come up with an idea that would be useful for an incumbent firm?

Perhaps it was never even really trying to think of a stand-alone idea. Really perhaps the efficient way to organize innovation in this industry was simply that little startups think of new ideas that existing incumbents are better at implementing. So that could be what's going on.

On the other hand, it could well be an idea that could grow into a new product that really would challenge the rival, okay, but it's uncertain. So if we went ahead and did this analysis, we'd still try and determine whether consumer surplus will be higher or lower with or without the merger, but there's going to be more uncertainty. So it's going to be a much harder problem and maybe harder to draw the conclusion that the merger will be bad.

On the one hand, if we allow the merger, the incumbent firm will get this technology and use it in some sense, although we don't even really know how the incumbent firm will use it, okay? If we disallow the

merger, it's possible the startup will just go down the drain or it's possible that if the startup survives, the product still won't be nearly as good as if the talented incumbent, who knows how to implement a new product, had taken it over.

On the other hand, the startup might succeed beautifully, and we'd not only have the product available to consumers, but we would have more competition, and everyone would be better off. So there's a lot of uncertainties, but nonetheless, it's fundamentally the same problem. Two firms have walked up to you, and you have to say, will consumer surplus be higher if I allow the merger or I don't allow the merger, okay? So that's what I'm calling the ex post problem. It's a slightly more complicated version of the two mature firms problem, okay?

But the point I want to leave you with or the point I want to stress here is that ex post problem isn't necessarily the theoretically right problem to be considering, okay? Why is that? What is the "ex post problem" ignoring? Well, the ex post problem is saying I already have this startup. Now should I let him be bought or not? He's already done his innovation, and now what should I do with him, okay?

If you were really setting a merger policy in

the real world, surely you'd like to take or potentially you'd want to take into account the fact that when I choose a merger policy, I'm going to make a startup innovation more or less profitable for startups. In particular, if I make it easier for incumbents to buy startups, doing startup innovation will be more profitable, and there's likely to be more startup innovation.

And, in fact, if it turns out that this is one of those industries where the efficient way to organize innovation is to let little guys think of new ideas and then big guys implement them, I might be getting in the way of just the efficient way of doing R&D and innovation in this industry if I started blocking a lot of these mergers, because they wouldn't do them. Startups wouldn't do them in the first place if they couldn't sell their product to the incumbent.

Well, I could consider that problem, too, and I could call that the ex ante problem, right, looking at the effects of the policy before startups have done their innovation. Now, I'd still want to answer the first question of, given this merger with this startup, will consumer surplus go up or down if I allow the merger? But that might not be the end, right?

If I want -- and I think, although I haven't

yet worked this out in a formal model, if we wrote down the formal model in a well-behaved model, we would predict that the fully optimal solution might be to be a little more lenient on mergers than the one that just implemented perfectly efficient ex post policies. That's because innovation is generally good for consumers.

So it might be desirable, at least in theory, to commit to a policy where you purposefully commit to approving some mergers that are inefficient ex post in order to create better innovation incentives ex ante, okay?

Now, the second problem, the ex ante problem, is the perfectly correct problem, okay? But it's a complete order of magnitude harder than the ex post problem, which is already a complete order of magnitude harder than the standard problem, okay?

Usually when I hear of experts on existing antitrust laws kind of get into the details of how they would analyze an actual merger between an actual incumbent and an actual startup, they do some version of what I would call describing the ex post problem; that is, I think they try and ask the question, this is hard to do, but I am going to ask, would consumers be better off if I allowed this merger? And they really

don't consider the issue of what effect will this have on innovation incentives of startups going forward.

I think that might be the right idea. I'm not sure, but I want to submit to you that this might not be a bad idea for two different reasons. I think that it's possible that this ex post problem is a problem that's simple enough that courts could actually evaluate it, and if you ask courts to evaluate problems where there's just going to be completely no factual basis for arriving at any sort of possible reasonable conclusion, you're just inviting them to give their own opinion. And so it might be better to restrict us to a fairly good question that they really can potentially answer, that's going to rely on some objective facts that can be presented before the court.

The second thing is, I'm not sure the two problems would necessarily yield that different an answer anyhow. I think if you've got a correct ex post policy, you're still going to allow plenty of mergers where the mergers would have never had any hope really of launching a separate firm. They're really just little ideas that the incumbent would have used anyhow. And if you apply that policy sensibly, I think you're going to allow a lot of these mergers, and there still will be good merger incentives.

And secondly, there's a countervailing effect. If you loosen up your merger policy to get the startups to invest more, the incumbent is going to invest less, and that's going to be bad. So there's a countervailing effect. If you try and loosen up policy away from the efficient policy, trying to get more mergers, to more innovation, it just may be that the incumbent will frustrate you by investing less.

So, on balance, I'm not sure that the slightly easier problem isn't that bad a problem in any event, and at a minimum, I think it's a problem that courts could potentially address. Maybe the way this really would work out in practice, often in real cases people always talk about what's the probability that we have to show that the startup would succeed? How high does that probability have to be? How certain do we have to be that the firm would survive by itself and actually be a good competitor?

All right, maybe in a theoretical world, you could think of, well, there would be a level to set that probability at that produced efficient decisions, ex post efficient decisions, and maybe you want to move it around a tiny bit if you were trying to do this fully optimal problem, even though no one knows how to do that, okay?

And I might imagine that the real problem that courts and enforcers will always think of themselves as solving is they take that probability as given, whatever it -- you know, it seems to be, given the case law, and then they just try and investigate whether the merger is ex post efficient or not. Over time, through some mysterious process that lawyers know about, courts maybe end up doing the right thing even though it's hard to calculate what that is. I have no idea, but I would submit that it might make sense for us to focus on this slightly simpler, incorrect problem, even though it is incorrect.

MR. SAYYED: Okay. Thank you, Bill.

I think this is the second panel I've moderated, and I think what people may discover is I'm not a very good disciplinarian, so I have envisioned this panel as sort of setting up the next two panels, and so I have allowed people to go a little bit over their allocated time, but one thing I do want to do is, after Steve and Will, give Paul and Susan a chance to respond. So just keep that in mind as you do your comments.

So we'll turn it over to Steve, and then Will.

MR. TADELIS: Thank you, Bilal, and thanks to the FTC for having this. I'm also grateful that I'm

actually speaking, because the way things were going, that wasn't certain.

Like Bill, I do believe that the current welfare analysis is the preferred tool, not surprisingly. I'm an economist, but I think these tools need to be carefully applied, because one thing that isn't said enough is that not all platforms are created equally. They don't all have the same business model. They don't all have the same barriers to entry. So there's a lot of discussion that people seem to lump together.

I heard this earlier. Oh, the Google/Facebook/Amazon/Apple, right? These are all different companies, different business models, and the devil's in the details, and I think that's something that is not said enough, which is why I wanted to start with that.

Now, going to a theoretical -- a broad theoretical perspective, there is no question that nascent competition is something we appreciate because of two main influences it has. One, it keeps companies at check in terms of pricing; and second, it's a great source of innovation.

Now, the first is noncontroversial. You know, without competition, dominant firms might take

advantage of the market, price higher, produce less quantity. That's an easy one.

The innovation thing is not as easy. So going back to 1962, Ken Arrow, a very celebrated economist, suggested that competitive markets are really what is needed for innovation, the reason being that in a competitive market, if you manage to innovate, get a slight cost advantage or a slight quality advantage, then you're going to gain a lot of market share from the rest of the competitors, and that gives you a tremendous amount of incentives to innovate.

Twenty years earlier, Joseph Schumpeter, another celebrated economist, said something very different, that in the long run, competitive markets do not provide true returns or super normal returns, and, hence, there's not much reason to innovate. You actually need market power in order to get the gains from innovation and to have those incentives in place.

And there have been a lot of studies, not enough maybe, to try to tease this apart. A recent, very celebrated article in the Quarterly Journal of Economics, which is one of the leading journals in economics, suggests that there's an inverse U-shape relationship between competition and innovation; namely, some kind of Goldilocks story. Too little is

not good, too much is not good, some healthy middle appears.

Now, I was very happy that Paul mentioned that we should encourage our graduate students to work on this topic. As it so happens, one of my graduate students, who is on the job market this year, has written a beautiful paper where he did something akin to retrospective analysis, which is not easy to do, spent a year and a half gathering data, where he took data from the DOJ's cartel breakup history, which clearly was an exogenous shock to competition, because one of the things we worry about and the reason empirical work is so difficult here is that competition and innovation are both determined not only by the relationship between them, but by what we call latent or lurking variables, and it's really hard to tease that causation/correlation story.

So what he did, he went back 30 years, collected data of breakups in different markets, defined the market carefully, treatment control. Obviously, like any study, there are some assumptions, but what he showed is actually that more competition creates less innovation measured by patent investment filings, by patent breadth, and by R&D investments. So I think the verdict is out about what is the right

amount of competition and, by extension, nascent competition in order to get innovation from the theory side.

Now, let me turn a bit to practice, because in theory there is no difference between theory and practice, but in practice, there is, and I was inspired by Susan and a handful of other economists who actually spent time in industry. I spent two years at eBay building and leading a team of economists. I spent a year at Amazon, also leading a team of economists and kind of, you know, seeing how things actually work and their relationship with startups and innovation more broadly.

Now, startups are the source of this nascent competition that we're talking about here, and the reason startups are created is because the founders and the people who invest in them believe that they will get returns in the future. No returns, no investment. That's kind of straightforward.

And startups are uncertain. You know, I'm, again, echoing something that Bill said. There's a lot of uncertainty in these innovative endeavors, so we need to focus what differentiates success from failures when we think about startups who engage in investment.

So, first of all, it could be bad products.

Now, by and large we believe that venture capital financing and other financing are going to be a pretty strong gateway -- you know, stupid product, I am not going to give you money. Of course, think Theranos, and you might think differently, but by and large, that is one mechanism in place. You might have a good product. You start investing. You need to acquire customers. That's something that Susan spoke about at length.

If you don't have enough money to engage in marketing to get your customers or the marketing costs are a lot more than you thought they would be, you might burn all your investment capital and then die not because you have a bad product but because you didn't manage to get that early start, the so-called chicken and egg problem.

Last, but not least, is poor execution, and I can't stress enough how many companies fail because of poor execution, something that, as an academic, I never appreciated. It's, like, oh, here's the model. In theory, it works. What's the big deal? Well, again, in practice, things are very different. This is precisely where acquisition exits have a tremendous amount of value. Again, I'm echoing something that Bill said.

Because execution is so difficult, it is those large companies who succeeded time and again who have put together the apparatus that helps with execution, and that is complementary to the success of many of these startups. So if we go to that question, kind of like that ex post idea that Bill promoted, we have to ask ourselves, if we allow this merger to happen, what will probabilistically happen in the future? And are there really barriers to entry for future competition that might be foreclosed if we allow certain mergers to happen?

And in platform markets, which is really what we're talking about here, those barriers to entry are primarily about indirect network effects, and those are going to be a barrier if, one, multihoming is costly, and, again, Susan talked about multihoming a lot; and, two, acquiring new customers is difficult, which, again, Susan mentioned at length.

And these are tightly connected, because if multihoming is easy, acquiring customers is easy. So my observations from my experience on the tech sector more broadly, but especially retail marketplaces -- since everybody else ignored the "Time's Up" sign, I might do that, too --

MR. SAYYED: Don't worry.

MR. TOM: Don't worry. I'm the competitor waiting in the wind.

MR. TADELIS: I know.

Then first of all, for many products and services, multihoming requires two or three clicks and two queries. So whenever I choose to buy something, within less than two minutes, I could compare Amazon, eBay, and Walmart -- and I often do if it's a more expensive product -- and truth be told, if it's a $12 product, I'm not going to bother, because if I'm screwed by 40 cents, that's okay. I can live with that. Again, every time I do those comparisons, I find the prices to be extremely similar.

Second, every time I take a ride, I have Uber and Lyft on my phone right next to each other. In 45 seconds, I will have that price comparison and time comparison. Sometimes I'm in more of a hurry and I will pay a dollar more to get there faster. Sometimes I'll rather save that dollar and wait another few minutes.

Then the second thing is that early-stage entry has become extremely cheap and very easy to do precisely because of a lot of platforms that came up like cloud computing services. What used to be a capital expenditure, buying millions of dollars of

servers, is now pay-as-you-go computing and storage, and that makes the early stages of entry very, very easy, and here I'm echoing something that Lina said. Barriers to entry are really critical to look at, and for startups in the tech sector, barriers to entry in early stages have declined dramatically.

Last, but not least, VC funding is really thirsty for potential entrants. One example is Jet.com. Four years ago, the company was founded. They raised close a billion dollars in venture funding, and shortly after that, they were bought by Walmart.com, and now they are driving Walmart's -- most of Walmart's online platform.

So going to another point that Lina mentioned, and she quoted Hal Singer from the previous panel, who mentioned this decline in VC funding. Well, there's a study by Oliver Wyman -- albeit funded by Facebook, so full disclosure, that's what I read -- but it shows that VC funding is at record highs. What has changed is where the VC funding is coming in.

Rather than coming in at early stages, it is now coming in at later stages of investment. Well, if you think about the reduction in barriers to entry to start a startup, that makes complete sense. That is a market reaction. Easy to enter, hard to execute, so VC

is coming into that later execution phase.

So I'm going to conclude with very quick -- very quickly with three points. So, first, I am convinced that the current tools, guided by solid economic thinking and those that guide empirical analysis, are adequate to deal with the topic that we're talking about today.

Second, as we move forward, I think we really have to be careful to do things on a case-by-case basis. There is no one-size-fits-all tool or application, and in that respect -- and this is, again, something that Lina mentioned -- I am a huge fan of retrospective analysis, and I wish we did enough -- we did more of it. I don't think we're doing enough of that retrospective analysis. Government agencies that have amazing data when they evaluate mergers could be a wonderful source for that kind of analysis.

Last but not least, I think that evidence suggests that in these so-called platform markets, entry barriers are low, multihoming is easy, nascent competition is not under threat by these acquisitions, and I think on the contrary, acquisitions help spur execution, which then lead to more opportunities for innovation.

Thank you.

MR. SAYYED: Thank you, Steve.

So let's turn to Will.

MR. TOM: Thanks, Bilal.

I am going to confine myself to two categories of comments, one on the nature of the tools and the second on the management of the tools.

So on the nature of the tools, I fully agree with Steven that the tools are adequate. I think the agencies have a very full toolbox. In fact, I think the toolbox is kind of overflowing, and therein lies a risk.

So I think the technical term for what has happened to the toolbox over the last couple of decades is the tools have evolved in response to changing circumstances, is that the tools have become squishier. So take, for example, the temporal issues that Paul identified in terms of the one-year/two-year kind of thing and the much more qualitative kinds of measures that found their way into the 2010 Guidelines. I think that was an effort to avoid some of the inaccuracies of kind of a Procrustean bed of bright-line rules about time periods, but you see the analog in a lot of areas besides time periods; for example, market share.

So market share and vertical theories, and I think the first time this really became clear to me was

in the Time Warner-Turner merger that the FTC handled more than a decade ago, and the notion that you see in the analysis to take public comment is that the share of foreclosure is a function of what is actually needed by the complementer, and so, you know, there the theory was the barriers that would be posed by new programming entities by control of more of the conduit, and the notion that you'll see in the analysis there was to launch a significant new program or programming network, you needed to be able to reach about 60 percent of the subscribers nationwide.

Well, you know, the inverse of 60 percent is 40 percent. If you can foreclose 40 percent, that's enough. You don't need the traditional monopoly share or anything like that. And so instead of a bright line, you know, suddenly it was a measurement that depended on the circumstances of the case and the competitive theory involved, okay?

So as these tools have gotten squishier, the risk of misunderstanding has increased, and one example near and dear to my heart is innovation markets, which is a term that the 2017 IP Guidelines has finally gotten rid of, and probably a good thing even though there was nothing wrong with the underlying concept. It's just that as interpreted and applied, nobody

seemed to understand what that underlying concept was.

The concept came about as a direct result of the GM-ZF merger in which you had two companies that barely competed at all in the downstream goods markets, just as a geographic matter, but it happened that to innovate in this product market, you needed a massive amount of manufacturing facilities, and there was an iterative, iterative process between the manufacturing and the innovation, and these were the only two companies that had it.

So even though they didn't compete much downstream, they competed heavily in innovation, and the benefits of that leapfrogging competition was felt worldwide, even in markets in which they did not compete, in the goods markets. And so the focus of the innovation market theory was on specialized assets.

So if you had a type of innovation that anybody in his garage could come up with, you really didn't worry too much about the restraint on innovation that came about from the merger, because you didn't know where the next breakthrough was going to come from, and so it didn't make sense for the antitrust enforcers to worry about.

That whole case hinged on the specialized nature of the assets needed to innovate and the fact

that very, very few players had it. So, you know, that's one set of issues that posits an example of the danger of the risk of misunderstanding as these concepts become more elastic.

I think, you know, currently, this notion of acquisitions of data may be another area that we really ought to think hard about before we leap at the latest, shiniest theory. I don't think these are really zero price markets. I mean, for the most part, when you're looking at mergers of two companies with significant caches of data, you're really talking about data acquisitions as input purchases.

They're getting data. Those data are useful to them in their business and helpful to them as they compete downstream, and they are paying a price to get that data. It's not a monetary price. They're paying in the form of offering consumers services.

So, you know, the old joke is that if you're paying a zero price, you're not the consumer, you're the product, okay? And I think, you know, that that has a lot of truth in how we ought to think about these mergers.

Okay, so another point about the nature of the tools is that as these tools become squishier, if you will, the complexity of the tradeoffs has increased,

and, you know, look, the asymmetries that Paul pointed to in terms of when we look at potential entry as a potential anticompetitive harm and when we look at potential entry as curing a harm from a merger, they're not always symmetric.

I think in some sense they don't need to be. In a broader sense, what you're looking at is a decision theory framework, right? What are the consequences of being wrong and the probabilities of being wrong and the administrative cost of getting it righter in both dimensions? And you make those tradeoffs against each other, and the probabilities don't necessarily have to balance if the consequences don't balance. So I think it's very much case by case, and, you know, maybe a great example of how granular those case-by-case determinations might be.

You know, I was always an admirer of Chairman Muris' handling of the Genzyme case in which he really drilled down into, you know, what are the incentives affecting the behavior of the CEO of the acquiring company? And, you know, sometimes I think you have to do that.

There are harms that we have to be cognizable of in these kinds of areas where we're looking at nascent competition. To reach for a somewhat old

technology example, Lilly-Sepracor, where, you know -- again, more than a dozen years ago, and Commissioner Anthony made some speeches about this one.

You had a branded pharmaceutical company acquiring an isomer or a company that had an isomer of its product. It appeared that the isomer was a product improvement. Some argued against the merger on the theory that Sepracor was the greatest potential competitive threat to Lily. The problem was that this nascent competitive threat, you know, by law would not be able to market this nascent competitive threat for four years because it clearly infringed Lily's basic patent.

And so, you know, I think there was a case where both the probabilities and the potential consequences weighed clearly in favor of letting the merger go through, because, you know, the probabilities were, you know, weighing the near-term benefit of the greater execution and the removal of the blocking position against this somewhat theoretical benefit of the future competition four years from now, and the consequences of that tradeoff was the benefits to patients now, health benefits, versus, you know, some theoretical harm, some theoretical benefit of price competition some years down the road. So I think you

know, you need to make those tradeoffs carefully.

Okay, let me just turn very quickly to a couple of words about management. When I was at the Commission, there was a Commissioner who was very fond of behavioral economics and was an advocate of applying it at every possible turn, and I could understand how it applied to our consumer protection mission, and I never could quite get how it applied to our competition mission until it hit me one day that if you turned the telescope around and trained it on the enforcers, behavioral economics would tell you quite a bit about the cognitive biases of the people within the building who were doing these investigations and making the case recommendations and voting on the case recommendations.

When it struck me, it seemed like a brilliant insight, until just a couple of days ago when I was searching the web for something else and I stumbled across a really nice article written by Bill Kovacic and Jim Cooper that made exactly that point. So there's nothing new under the sun, but we should pay attention to the fact that narratives are powerful. They're especially attractive when they seem like novel insights, you know, and my feeling about or, you know, my belief that, gee, I had this brilliant idea about behavioral economics, might be an example of that,

where you weigh much more heavily things that are novel and exciting and fun, and you stick to them even if a sober analysis of the potential consequences might lead you in the other direction. So that's point one on management.

A second point is, you know, attitudinal approaches. Former Acting Chairman Ohlhausen has spoken a lot about regulatory humility, and that, and that, I think, scratches the surface of what enforcers might think about as they approach some of these new complexities. I also think we should think about some process approaches to managing these tools.

One thing that always struck me was there has been an unwritten rule that's grown up at the FTC about the number of meetings you get with the Bureau Director, and it's colloquially referred to as the "one meeting rule," and I think it makes a lot of sense in traditional horizontal mergers where, you know, the volume is such that if you allowed more than one meeting, you'd never do anything else, and the analytical paths are straightforward enough that additional meetings wouldn't help very much.

But in novel and cutting-edge areas, I would really like to see that unwritten rule abolished. I think there's nothing worse than having the staff go

down a particular route or, you know, pursue a particular hobbyhorse, maybe driven by some of these cognitive biases I was talking about, and work for months and months or years on a matter only to -- you know, when management finally pays attention, to find that there are whole dimensions of the issue that they have overlooked. So a "one meeting rule" -- devil's advocate -- I think can be very useful and maybe ought to be formalized.

People have talked about retrospectives, and I heartily endorse that, although they're highly resource-intensive. And so, you know, all of these things I think become evermore important as these tools become just a little more ephemeral and difficult to follow clear and well-traveled roads.

Thanks.

MR. SAYYED: Okay. Well, I think we are actually out of time. So I am not going to eat into the next panel's time. So we are going to take a ten-minute break, and we will be back here with the second panel on nascent competition.

(Applause.)

(End of Panel Number 3.)

PANEL 4: NASCENT COMPETITION:
ARE CURRENT LEVELS OF ENFORCEMENT APPROPRIATE?

MS. WILKINSON: Welcome back, everyone, to our afternoon session on Nascent Competition in Digital Markets. My name is Stephanie Wilkinson. I am an attorney advisor in the FTC's Office of Policy Planning and I will be moderating this next panel.

So we just heard a really good discussion during the last panel regarding the analytical framework for evaluating acquisitions of nascent or potential competitors by established incumbent platforms and digital markets. We are now going to consider whether enforcement levels are appropriate for these types of acquisitions, which for the sake of brevity I am going to refer to as "nascent acquisitions." We will start with brief opening remarks from each of our distinguished panelists and then continue with Q&A.

So without further ado, I am going to turn this over to Daniel Sokol. He is a law professor from the University of Florida, Levin College of Law and a senior of counsel in the Washington, D.C. office of Wilson Sonsini Goodrich & Rosati.

MR. SOKOL: Thank you. It turns out I am the only one with slides. So here is what I was thinking

about -- and it would have been helpful had I coordinated with the prior session because some of these themes have been covered, which means it was a successful session. And what I will do is I will reposition, the way that either every incumbent or new entrant has to when something interesting happens.

So I thought my own framing of how to think about these markets was slightly different than other people's. It was not Paul's focusing on law; it was not some of the others focusing on economics. I thought about it in the following ways by giving two possible examples. One is what does nascent competition mean; one is where we have a nascent competitor; one is where we have a nascent market.

So the nascent competitor is the Facebook-Instagram story, potential, a new rival in social networking and/or photo sharing where the market in each of these was a little bit developed. The alternative was, I would say, more Google-Admob where the market itself was really, really new, so all the competitors were nascent. And it is not clear that this market would have actually succeeded. So even if the firms somehow were rivals -- not clear to me that they were exactly -- there is a lot less risk in this secondary type because it is not clear that the market

is going to develop in the same way.

So does the current legal framework for mergers work? Yes. And here the proof is, peer reviewed empirical studies. So actually this goes to another definitional question of what do we mean by tech. Because does tech specifically mean platform markets? That is where we have been focused. Or does tech mean broader technology related markets? So we heard, for example, Genzyme-Novazyme, a fascinating case, you know, and I think rightly decided. So that was in the pharma setting. So does tech also mean pharma? Does tech also mean devices? Does tech also mean hardware?

Going to our very first panel today, does tech mean FinTech in a way that is, say, a different kind of mechanism? And here I want to thank Steve for walking through like how actually platforms are not all made the same. So these are some introductory thoughts. I am going to zip right through these in the interest of time.

So venture capital actually is riskier. The law of venture capital, which I teach, is also riskier. And so we have various legal tools along those lines. And I give some examples for that of why that is the case. But you have heard already quite a bit of that.

So I am actually going to focus on something else. Two different things.

One is the changing VC ecosystem. So again if we are thinking that tech equals platform tech, then it is fascinating that up until now what we have not really heard about are, for example, three very large tech companies in China with a number of other large companies. If we are looking, for example, by market cap or by revenue, these are significant players as well and they are also significant investors in the -- there is significant Chinese investment in the ecosystem. How do we know? Because this past quarter was the first time Chinese venture capital passed that of U.S. venture capital. Yet, this is not what we have had the conversation about as of yet at this hearing, so I raise that.

The second is we have talked simply about venture capital. Let me suggest to you that there is this other category called corporate venture capital. So I think one of the -- though this has existed for a long, long time, decades, Intel was really the first tech company, as I would define tech, to spend lots of resources in this area for corporate venture capital, billions over the course of years. The last year in the deal book, I think formal corporate venture capital

was roughly some $30 billion.

And the way that they are trying to make investments in corporate venture capital is much the same way that we are seeing in traditional venture capital, but somehow it might benefit the company in new and interesting ways. People forget after Peter Thiel invested in Facebook. Do you know who one of the next major investors was? A little company you have never -- a venture capital company you have never heard of called Microsoft. Okay? We see this kind of innovation in corporate venture capital.

But based on what Will Tom said, I am going to throw in yet a third thing not on the slide. This is how you know I am repositioning. And that is there is a lot of investment just short of actual financial investment. So think of any kind of strategic alliances, licensing agreements, joint ventures, et cetera, just short of actual merger type ownership integration but something akin to a financial investment.

So we will zip through yet again. So I think I am going to preview something that the next panel is going to talk about and that is for years I pushed on Commissioners on both sides of the aisle the importance of having a tech group. I have a different vision for

what this might look like than what you have heard before.

I think very clearly a tech group needs to be under the purview of the Bureau of Economics. There is a reason for this. Because it turns out -- and this goes to something Bill Rogerson raised and so I think it was masterful for a number of reasons, but I want to summarize some of the takeaways I got from his talk -- A, it turns out that we learn by analogy and we have seen certain things before and we are applying it to new circumstances. I think that is just as true for law as it is for economics. But herein lies the issue in this required integration of all the panels that we have just heard. It turns out that what we have to understand is if law -- and antitrust law is based on economic analysis, the economic analysis is, in turn, based on how do we understand the technology. If you misunderstand the technology, all of our assumptions are wrong and what we are looking for empirically is also wrong. This is why we put it in there.

The second thing that I would do is that say it turns out all tech is different. So, you know, the person who understands devices does not understand on-line platforms.

The third thing is we have a few different

ways of seeing how these experimentations work. One is the competition market's authority in the U.K. that is doing spectacularly interesting work in this area. The other is the President's Council of Advisors on Science and Technology where you actually bring in experts from the field for a while. Wouldn't that be awesome if we had very high level experts coming into the Federal Trade Commission the way we do with the spectacular economists that spent two years from the academy? And I will just end there. Thanks.

MS. WILKINSON: Okay, thank you, Danny.

Next we will hear from Diana Moss, who is the President of the American Antitrust Institute and adjunct faculty in the Department of Economics at the University of Colorado at Boulder.

MS. MOSS: Thank you, Stephanie. And thanks to the Commission for holding these hearings and to OPP for mustering the significant resources to plan and organize them, and especially to Stephanie and Elizabeth here for really doing a lot of prep work on this particular panel, which I think hopefully will show through in the discussion here today.

So just for openers, I want to make three broad framing remarks. One is, what we are here to talk about, the level of enforcement, antitrust

enforcement involving digital markets and especially nascent -- acquisitions of nascent competitors is adequate or should it be higher or lower, what should it be.

So my observation is that history tells us that the levels of enforcement, this type of enforcement is pretty low actually. So AAI collects data on enforcement levels across long spans of time. We just filed a letter on the SMARTER Act and included data in there showing about a two-and-a-half percent challenge rate across both agencies from about 2000 to present day.

So if you look at the number of acquisitions in the digital market spaces, over the last three decades, we are looking at -- these are major acquisitions. Rough cut numbers, do not cite or quote. But we are looking at upwards of almost 700 transactions. And I would query everybody in the room here go back through your mental Rolodexes and ask yourself which acquisitions have been challenged by the FTC or the DOJ, and the list is very short.

That does not mean that enforcement is too low or too high. It means that it is a question. It raises a legitimate question. So it is not because the agencies are not looking or seeking and finding or not

finding potential violations of Section 7. It could be because the agencies are not using the right lens and that would be my argument. That it is a lens problem. We are not asking the right types of questions. We are not looking at stepping through the merger guidelines methodology in a way that would be conducive to properly identifying and framing potential competitive harms in digital markets. So I think there is a lot to be learned there.

So second, I want to try in my comments today to dispel some myths and arguments that have sort of driven, for lack of a better time, forbearance from enforcement in the digital market spaces. One argument is, well, we just do not have the tools. You know, the toolkit is not adequate enough. Antitrust is too slow for the digital markets, it cannot keep up. These were all arguments made in Microsoft, which turned out to be absolutely patently false. Antitrust absolutely could take on the challenges presented by Microsoft many years ago and it can do the same today. So it is not a tools issue by a long shot.

Second is, well, it is difficult to predict what these nascent technologies are going to be doing. How are they going to develop? Are they going to turn into significant competitive threats? The failure

rates are high. You know, what do we do? Do we throw our hands up and say, you know, hands off, we are not going to get involved here or do we actually try and dig down and develop a set of tools and frameworks to help us enforce Section 7 in a coherent way.

Third, in terms of dispelling myths and our arguments, is this argument that, well, if we lean on the digital market acquisitions too hard we are going to kill the goose that laid the golden egg and that is this model of entrepreneurship that is financed by venture capital that creates small startups that are incubated by the platforms and that are taken into the fold by the platforms which creates this sort of symbiotic or even other type of model.

My response to that is we should not be waylaid by those arguments. Antitrust is not about picking winners and losers. It should be neutral to the type of business models that underlie a lot of innovation and how entrepreneurship spurs innovation. Entrepreneurship is about people. It is about places and it is about process. There are lots of models of entrepreneurship. Antitrust should not be deferring to or favoring any particular model of entrepreneurship.

Finally, I believe the current tools that we have in our toolkit -- and I think this has been spoken

to -- are certainly adequate and flexible enough. We have models. We have theories of competitive harm. We have many observations about conduct involving firms in markets with very high levels of concentration.

But what we need to do is use the consumer welfare standard to the full extent of its capabilities. And that would be what I call a dynamic consumer welfare standard. That means we look at dynamic effects on the competitive effects side. That means looking at short-term price effects, but also longer term dynamic effects around quality, variety, innovation, even choice, consumer choice. But we also look at dynamic effects on the efficiencies side.

Right now, arguably, and I am sure many of you will disagree with me, antitrust has really suffered greatly from looking at very static effects on the competitive effects side, but then allowing very dynamic efficiencies as justifications for acquisitions. That is a very asymmetric, unbalanced implementation of the consumer welfare standard. We should be looking at a dynamic symmetric implementation of the consumer welfare standard in this particular space. I will leave it at that.

MS. WILKINSON: Okay. Thank you, Diana.

Next we will hear from John Yun, Associate

Professor of Law and Director of Economic Education at the Global Antitrust Institute. Prior to joining GAI, John served in various roles at the FTC's Bureau of Economics.

MR. YUN: Thank you, Stephanie. Thank you to the FTC for having me. It is exciting to be part of this panel.

So I am going to make you really happy, Stephanie. I am going to talk about one minute and then let's just get started with the questions and get this thing rolling.

Basically, when we are talking about nascent competitors or technologies and potential competition, we are in a dynamic setting. I think that is a good place to be. Static is important but dynamic clearly is harder, but it does not mean that it is not important. In fact, it is probably more important and I think that holds for efficiencies and entries as well.

So the point I think I would like to make -- and it is something that Diane just mentioned -- is symmetry and I think there should be symmetry in how we approach both dynamic harms as well as dynamic benefits, static harms and static benefits and I think that is the approach that we should have. Clearly,

elimination of competition, whether static or dynamic, is important and relevant and we have to look at it, but so are efficiencies and entries. I think that is the story that we need to be sort of focusing on rather than one side or the other, I think, to be fair.

So what guides us ultimately will be the evidence of each particular case. We like to generalize broadly what we learned or did not learn from certain cases, but each case is going to be different when you are in the dirty business of bringing a case and analyzing a case and I think that is sort of another takeaway I would like to sort of establish. So with that, I will conclude my comments.

MS. WILKINSON: Okay. Thank you, John.

Next we will hear from Jonathan Kanter, a partner at Paul, Weiss, Rifkin, Wharton and Garrison. Prior to entering private practice, Jonathan served in the FTC's Bureau of Competition.

MR. KANTER: Great, thanks. It is an honor to be here alongside my fellow panelists and here at the Commission.

I first stepped foot in the halls of the FTC as a summer intern in 1996 after my first year of law school and, at the time, the Chairman of the FTC was Chairman Bob Pitofsky. He was revered then inside the

building, outside the building, and everywhere he went. Seldom would you encounter a finer antitrust mind and a finer leader in the antitrust bar. He was a model of rigor, sophistication, and intellectual capability.

And in thinking about this session and the hearings generally, I am drawn to some of Chairman Pitofsky's writings. And if would indulge me, I am going to read from them because I think it is a helpful backdrop not just for this panel but the hearings generally.

Chairman Pitofsky, who -- I think no one would argue -- was seen sipping locally-roasted cold brew in Brooklyn while listening to a 180 gram vinyl, taking care of his pet rooster, I think he was a very serious and rigorous antitrust practitioner.

"It is bad history, bad policy and bad law to exclude certain political values in interpreting the antitrust laws. By 'political values,' I mean, first, a fear that excessive concentration of economic power will breed antidemocratic political pressures, and second, a desire to enhance individual and business freedom by reducing the range within which private discretion by a few in the economic sphere controls the welfare of all.

"A third and overriding political concern is

that if the free-market sector of the economy is allowed to develop under antitrust rules that are blind to all but economic concerns, the likely result will be an economy so dominated by a few corporate giants that it will be impossible for the state not to play a more intrusive role in economic affairs."

Chairman Pitofsky then discusses some of the inevitable criticisms and goes on to say, I quote, "Despite the inconvenience, lack of predictability, and general mess introduced into the economists' allegedly cohesive and tidy world of exclusively microeconomic analysis, an antitrust policy that failed to take political concerns into account would be unresponsive to the will of Congress and out of touch with the rough political consensus that has supported antitrust enforcement for almost a century."

So against that backdrop, we are talking about nascent competition, dynamic competition. And one of the questions that often comes up is, well, how do we take the tools, how do we take the merger guidelines, how do we take all these things that we have come so familiar with and use as crutches to try to understand these issues in a dynamic space?

And the answer really is not trying to fit the facts into a model and not trying to fit the

realities of the market into a box, but if the boxes do not fit then we need new ones. Or they were not the right ones in the first place. And so I do think with that having been said, there are some helpful guideposts that we can use when thinking about nascent competition both from a Section 2 perspective as well as a Section 7 perspective.

So first is the Microsoft case still provides a very helpful framework for understanding the impact of nascent competition. It talked about exclusion of a nascent competitor. It is interesting to note that in the Microsoft case the Court said when you excluded a nascent competitor you had to own the acts of your own deeds or the results of your own actions. And if you break it, you buy it. So you didn't have to prove, in that case, that the nascent competitive threat would have resulted in something that came to fruition, but that it could have.

And so in thinking about that, there are a couple things I guess I would encourage the Commission to think about and the bar to think about. First, when should there be heightened concerns? I think Chairman Simons noted rightly that often if you are looking at market power, you look at the biggest companies. Well, bigger is more suspicious and I do not think it is

controversial to suggest you are likely to see more problems when you have companies with market power and large market share.

Winner-take-all or winner-take-most markets are likely to be more concerned for nascent competition that could be disruptive. Monopoly maintenance, acquisitions that intend to create a monopoly or maintain a monopoly are the kinds of things that should result in heightened concern -- impact on dynamic competition.

Markets where there is social utility, news or information, these markets have traditionally and the law has traditionally looked on them with greater scrutiny and greater concern because of the social value and we should not lose that and that fits well with Chairman Pitofsky's remarks.

The behavioral realities of participants on the platform. So let's not try to pretend that consumers are homogeneous. They are idiosyncratic and often behave in unpredictable and sometimes “irrational” ways.

Last thing is does the transaction or the conduct relate to a conflict of interest and will the transaction or the conduct change the incentive and ability to engage in that or exercise conduct as a

result of that conflict of interest in a way that harms the integrity and the output on the platform itself.

MS. WILKINSON: Okay. Thank you, Jonathan.

And, finally, we will hear from Sally Hubbard, a senior editor with the Capitol Forum where she covers monopolization issues and data regulation in high-technology markets. Previously, Sally served as an Assistant Attorney General in the New York State Attorney General's Antitrust Bureau

MS. HUBBARD: Thank you to the FTC for having me here today. And I want to give the standard disclaimer that I am sharing my own views and not the views of my employer.

I want to echo actually a lot of what Jonathan just shared. Since this panel is about enforcement levels, I can sympathize with enforcers since I was an Assistant Attorney General. The litigation realities for challenging these types of mergers are pretty harsh. My view is that current antitrust doctrine is really missing the forest for the trees. And I do not think this is an accident. I think it is as a result of a decades long campaign by Chicago School economics and corporate defendants to really weaken the antitrust laws. So this is the reality that enforcers are facing.

And in recent years, though, however, I have been able to step back from those harsh litigation realities as a writer focusing exclusively on Google, Apple, Facebook, Amazon and antitrust. What I have gotten to do is have the luxury of looking at the big picture. I get to look at the forest, and what I am seeing is really more like a cleared Amazon Rainforest than a healthy competitive landscape.

As Diana mentioned, there has been hundreds of acquisitions by the big tech platforms. I am talking about Google, Apple, Facebook, Amazon. Hundreds of acquisitions, billions of dollars' worth of deals, and many of those deals have allowed these firms to maintain their monopoly power, extend their monopoly power or eliminate competitive threats.

So when enforcers are looking at tech platform acquisitions, they should not get distracted by promises of short-term consumer welfare enhancements because what benefits consumers is competition. A short-term product improvement that is labeled “procompetitive” does not justify the elimination of a competitive threat. After all, Section 7 of the Clayton Act "prohibits mergers and acquisitions where the effect may be substantially to lessen competition or to tend to create a monopoly."

The Clayton Act does not qualify this prohibition by saying unless the merger creates efficiencies, or unless the merger leads to low prices in the near term, or unless the merger allows an entrepreneur to exit competition.

And let's not forget the second part of Section 7. It prohibits acquisitions where the effect may be to tend to create a monopoly. This means, as others have pointed out, that enforcers should scrutinize acquisitions by dominant platforms more heavily than acquisitions by firms that lack market power. But as you have heard on some of these panels, our familiar metrics that we like to rely on as antitrust enforcers are not really that reliable, right? Prices, market shares, market definitions, markets are very fluid. Those handy tools that we are used to relying on can fail us when we are looking at acquisitions of tech platforms.

But I want to remind everyone that price effects are merely one of the several metrics that are used to assess whether competition may be lessened and low prices are not the goal in and of themselves. Competition is the goal. Competition is what maximizes consumer welfare in the long term.

And the product definition markets can lead

enforcers astray because the biggest competitive threat to platform incumbents are likely to come from firms that are in seemingly different product markets altogether. Why is that? Well, because startups that want to challenge tech giants and their core competencies cannot actually get funded.

So if our typical proxies are not much help, enforcers should be able to show competitive effects directly. They should not have to prove the second-best proxies. And this is what the horizontal merger guidelines already say. But often courts do not go along with this.

So where do we go from here? I see about four main options for enforcers. The first is to bring hard cases and try to change the legal doctrine and the current standards. You got to pick the ones that have the best facts, but you also have to know there is a good chance you are going to lose. And if Congress agrees with you and disagrees with the courts, that could help spur option number two, which is a legislative fix.

There have been some proposals like the Klobuchar Bill. The odds of any of these things passing is a question, especially as these tech giants keep increasing their lobbying budgets.

The third option is for the FTC to get creative with the tools that are available. Use Section 5. Use rulemaking authority as Commissioner Rohit Chopra has recommended. Know that privacy regulations can also open up competition, as can interoperability. And even make second requests automatic when you are dealing with such dominant platforms.

Now, the last option is not really an option in my book, but that is to do nothing and allow tech platforms to eliminate competitive threats into perpetuity. Thank you.

MS. WILKINSON: Okay. Thank you, everyone, for these opening remarks. We will now move into the Q&A portion of the panel.

As a reminder to the audience, if you have questions that you'd like to submit to the panel, please fill out one of these cards. We will have people walking around the auditorium and collecting these cards and then they will make sure they get sent up to me.

So I would like to start off the panel by asking everyone some broad foundational questions. Are current levels of merger enforcement in digital markets appropriate? Should the antitrust agencies be more

concerned about false positives or false negatives when making enforcement decisions regarding nascent acquisitions in digital markets? And are there particular cases where you believe the antitrust agencies either went too far or did not go far enough in their enforcement efforts?

And for such cases, I would be interested in hearing feedback that could be instructive for future investigations, such as whether there is an alternative analytical framework that you believe the agencies should have used to evaluate these acquisitions or whether there are facts that the agencies may have missed that were reasonably available at the time of the acquisition and, if known, might have resulted in a different outcome.

I'll open that up to the panel.

MS. MOSS: Do we volunteer?

MS. WILKINSON: Sure. Diana, going first.

MS. MOSS: Okay, thank you. So very good question. I have just a couple remarks on this. One is, frankly, it is difficult to say whether we should be concerned about false positives or false negatives for two reasons. One is we have had relatively little enforcement in the digital market spaces. So when you do not have any observations to work with, it is kind

of hard to tee up those counter-factuals.

Second, we do not have the benefit, as we do in nondigital markets, of a lot of merger retrospectives. So we have now heard all day long how valuable merger retrospectives are. And, of course, we are dealing with a lot of data and evidence mainly through the work of John Kwoka and all the scholars who have produced individual retrospectives that really support the notion that we should not be so concerned about false positives; that four-to-three mergers, for example, are almost incredibly surely to be damaging and that enforcement actually supports higher levels of challenges in cases of four-to-three mergers.

We are just not there. You know, we are in a warp. We are in a time warp here because enforcement in digital markets is really just evolving at this point and we have not done retrospectives. We can talk later about what those retrospectives might look like.

My second point on this particular question is -- you know, is the framework correct? Is the enforcement level correct? Well, you know, I think the way you think about the framework is in the digital market spaces, much like in nondigital market spaces, you are talking about three fundamental types of consolidation. One is horizontal mergers. For example

Google-Softcard, Facebook-Instagram. You are talking about vertical mergers that combine firms in adjacent markets. That would be in Google-ITA, that was online travel and back-end travel software; Apple-Shazam, that was music identification technology and music digital procurement technology. But we are also talking about conglomerate mergers in the digital market spaces.

I think this is the big one. It is that antitrust has never done well with conglomerate mergers. It rarely does very well with vertical mergers, cite CVS-Aetna, and look at our press release on the AAI website.

Horizontal mergers, it does pretty well looking at overlaps and the elimination of head-to-head competition. We have lots of tools to help that analysis along. But it really sort of deteriorates from there. Vertical is a challenge. If vertical is a challenge, conglomerate is going to be an enormous challenge.

So mergers like Microsoft-LinkedIn, I would put in the conglomerate merger space. You can argue with me on that. Facebook-Face.com, that was social networking and facial recognition. Google-DoubleClick combined ad serving through pay-to-click and ad serving through banner and exchange ads. These are all mergers

that fill -- that occur in more broadly defined markets. And that is very much in keeping with the digital platforms because it is all about linked services and products, connectivity, and the development of value-added services to users and consumers.

Antitrust does not think well that way. It is all about transactions. It is all about buyers and sellers and suppliers and distributors. So we really do need a different frame of reference.

And when we get to the conglomerate mergers and talk more specifically about competitive effects, I think we have even more problems there.

MR. YUN: Can I weigh in?

MS. WILKINSON: John?

MR. YUN: So I have heard a lot about retrospectives and I agree you have to be for retrospectives. If you are not for retrospectives, something is wrong with you I guess. So I am for it.

But if you are actually going to do it, how do we do it and what does it look like? So let's get in our time machine, our back to the future time flux capacitor, hot tub time machine, whatever you want to get in, and go back to April 9, 2012, when Facebook bought Instagram. Instagram, at that time, had 50

million people. What would we expect for that to be ex ante -- looking ex ante to be ex post as sort of an okay merger? That Instagram would have puttered along to what it was, 50, grown at an historic rate, integrated into Facebook to some degree. And we are like, okay, that was a good merger. It did not seem like it was that important a -- or they discontinued, after a few years, Google Plus Style, and it was just like, oh, it did not really go anywhere. I guess it was not important again. Or it gets very successful. It becomes one billion users or 19 times its size, which is the reality today.

So when I look at that growth from 50 million to one billion, you know, in a pretty short period of time I do not know what to do with that. That does not strike me as, on its face, anticompetitive. It seems like it expanded tremendously and reached a lot of consumers. I do not know it for a fact, so I am not going to assert it, but I am sure Facebook has poured plenty of technology into that product.

And so that is, I think, the difficulties we face with these counter-factuals and what is the right one for these types of things. Suppose that Facebook's purchase of Instagram increases probability of success. Let's just assume that, whereas it was 50 percent times

three, which is a compound percentage of 12.5 percent of success in a market. There are a lot of hurdles these younger firms have to overcome and there is some probability they fail and probability they succeed.

What if they increased it 20 percent, 30 percent, 40 percent? That compound probability doubles, triples. And so is that an efficiency we recognize? Would that, in a retrospective, be something we credit the agencies for getting right?

And those are just the questions I have and I am not asserting Facebook-Instagram is the model of a procompetitive potential acquisition or it is anticompetitive. It is just I think there are some difficulties in really coming up with the right counter-factuals when there has been exponential growth. So that is sort of something I wanted to throw out there.

MS. WILKINSON: Sally?

MS. HUBBARD: The Facebook-Instagram merger is one of the ones that I think is kind of the biggest mistakes to have let through. One of the warning signs that there was, that could be a little bit of a red flag to look out for in the future is that Facebook was paying $1 billion for Instagram at that point. Instagram had no revenue and they had 50 million users.

What did Facebook see that it was worth a billion dollars to them? So that is a red flag to look out for.

And then what has been the impact of this going forward? I have written about how I think a lot of the fake news and privacy problems that we are having with Facebook right now are related to the fact that it is a monopoly. It does not have the pressures of competition to discipline it. I think competition and the economy keeps firms on their best behavior, either that or regulation, right? I prefer competition.

I know after the Cambridge Analytica scandal a lot of my friends said, oh, well, I am quitting Facebook, but I am still on Instagram. They did not even realize that -- you know, they did not have a choice. They did not have a way to vote with their feet and say, no, it is not okay for you to give our data away without our permission.

So I think -- and another thing is that Facebook basically has Instagram as its fall-back Plan B. It is really behaving in an irrational way, letting its brand reputation go so downhill with the way it is really not fixing the problems. But it knows it has a Plan B, which is Instagram.

So I think that is actually one of the most problematic of the mergers, but I think pointing to that offer price is one way, one thing to look at there.

MS. WILKINSON: Okay. Jonathan?

MR. KANTER: So all helpful points. I am going to stay away with commenting on any specific transaction or specific company, but I do think it is helpful to make a few observations here.

One is, we seem to understand, or at least we feel like we kind of understand these issues, in the context of Section 2, right. And so if excluding a company, it would be a problem, then maybe buying a company is a problem. Maybe it is not. But is the analysis when you are talking about nascent competition really all that different? And should it be different? Maybe not. I think that is something worth considering.

Second is, this kind of goes back to something that Danny was talking about, which is -- and to some degree, Diana -- I think we get tied up in formalistic distinctions, like horizontal and vertical and conglomerate, right. I mean, it is like trying to watch 4K TV through an 11-inch black and white TV set. Right? I mean, those are distinctions that really do

not apply to a multidimensional, three-dimensional age.

And I think sometimes the problem with the law focusing so much on economic theory is it gets anchored in theories that are kind of stayed. Those kinds of distinctions, as being the anchors for how we evaluate these kinds of problems, tend to throw us off and away from the issues that really matter. And so I think we have to figure out better ways to look at the dynamic nature of competition.

And when I think about it, you know, people often talk about Schumpeter and so long as, you know, the next thing is on the horizon, everything is going to be fine, but the issue on platforms is that the next thing on the horizon is often this new nascent threat that comes on the platform. And so you have to make sure that there is enough room on the platform for these new threats to emerge and to breathe.

And you know, I am sympathetic to what John was saying. I mean, these are hard issues. How do you figure out which deals to block and which ones not to block, when to take action and when not to? And I get that, it is hard. But I think the paralysis due to concern about false positives has resulted in perhaps an overcompensation to the point where maybe we are not addressing problems that need to get addressed because

we are so dependent on defending our tools that we are not spending enough time rethinking them.

MS. WILKINSON: Okay. Thank you. Danny?

MR. SOKOL: Some very quick points. So sometimes we have merger retrospectives, we call them academic empirical work. The problem is a lot of times we all look narrowly at the Iowa economics literature. There are not as many of these studies as we would like, but, in fact, they do exist, in finance and information systems, in marketing, strategic management and operations management.

And specifically to the point of Facebook-Instagram, you know, we have that. It is called an A publication to get you tenured at any of the schools where we had business school professors earlier, Steve, Judy, Robin, Bill. That was in management science. Li and Agarwal's 2017 paper, Platform integration and demand spillovers in complementary markets: Evidence from Facebook's integration of Instagram. And, in fact, what they find is that the deal was procompetitive and it actually also helped the larger of the third-party complementary app developers. So I think we can put that one to rest.

Broadly, I would say merger retrospectives

are helpful in a different way. It helps frame a broader political debate, something John raised earlier. So I think one problem that the agencies have had here relative to other -- oh, this is the first time I have ever been told I need to speak into a microphone. Normally, my voice carries.

So the other thing is relative to, say, DG Competition, I think the U.S. agencies do a less good job in this particular area. And that is in mergers, in deals that they allow to go through, they do not give the kind of detailed commentary, particularly for high-profile deals, particularly for platform deals that we have seen DG Comp do. And I think that this goes to some of the political questions that get asked because people are frustrated because the agency simply is not sharing its knowledge I think as effectively as it could. It is a different form of storytelling, but I think one that is highly important.

The other thing is I want to put in a plug for the work of AAI because AAI really has tried to think interdisciplinary-wise, along a number of different areas to sort of think what do we know and how can we sort of bring in tools from different disciplines to help tell a more nuanced story. So just a little plug there.

But actually a plug back to something that John brought up earlier, like how do we think, for example, about quality? So I want to plug somebody in the audience and that is Debbie Feinstein because when she was head of BC, one of the most fascinating, nuanced and, I think, compelling speeches that she gave was to talk about how do we look at quality and how do we listen to particular stories, specifically in the hospital merger context, for qualitative evidence, where again, qualitative evidence does not get treated the same way in courts as the cost-based evidence does. And I think she gave a very nice framework for how the agency should use that. So final plug. Thanks.

MS. WILKINSON: Great, thank you.

Okay. So let's now move on to questions regarding product market because we have heard a lot about this over the last few days with platform markets. How should relevant antitrust markets be defined when evaluating nascent acquisitions? Would defining markets more broadly allow the agencies to challenge more of these acquisitions?

And as you are answering that, think about, on the other hand, if markets are defined more broadly, don't we also have to consider how that will impact market structure and our ability to allege that

competition is substantially lessened? In other words, if we define the market more broadly and we have to include more firms in the market such that the market shares and HHIs become more diluted, would that actually reduce our ability to challenge some of these nascent acquisitions?

Also, how would this impact our ability to allege a narrow product market in subsequent cases, if appropriate?

John?

MR. YUN: So taking a step back, I know Paul Denis went through the classification of what is nascent and potential competition. So I do not want to -- well, I will rehash a little of that, but I do want to get some terminology clear because I think it helps us answer this question. If done right, I do not think we go anywhere in terms of broadening or narrowing.

So here we go. A nascent competitive threat came out of Microsoft largely, as we sort of talked about it today, and it was about emerging technologies. In that case, it was Netscape and Java and Middleware, as those being sort of technologies that were not in the relevant product market, per se, but either would be in the future or would facilitate others, including themselves, in the future. And that was sort of the

idea. And sort of on its face, that is a reasonable enough conjecture and hypotheses, and I think that is a good way of looking at it.

Potential competition is -- I like to think of it actual versus potential entry. Actual entry, we know it is a competitor today and it is competing and it affects price. Potential competition, as I perceive it -- and I know others use it a bit differently -- but I think generally as a guideline, this is in sentence one of the merger guidelines. We hear it a lot. Oh, we need more stuff happening in FTC. Sentence one, "Guidelines outline the principal analytical techniques, practices, and the enforcement policies of the DOJ and FTC with respect to mergers and acquisitions involving actual or potential competitors.

So there the relevant market is the relevant market. It is just they are not in today, but there is some projection, whether it is tomorrow or two years or three years, that they will be in the future.

Now within potential competition, there are further delineations. What is it? It is actual potential competition and that's -- how I would think of it is just an entrant that has not come in yet but could.

Then there is the perceived potential

competition where there is not really an entry story, it is just their presence constrains prices today so they are a competitive influence. And then there is potential potential competition, which is the Nielsen-Arbitron, which I like to think of as a potential entrant in a potential market. I think that maybe is a little helpful. Or future market. I think that is more fun, future. So those are the terminologies.

So if we do those right, I do not really think we need to go in broader stuff because when we go broad -- and I think others have probably picked up on this -- we have to be careful. If you are saying, well, Instagram was a competitor and it was not a nascent competitor, but it was sort of a competitor in a differentiated space, then you are expanding the market.

Well, some people would say, no, you do not have to do that, you can sort of in a nonlinear say they were unique. I think you are getting into very ad hoc, dangerous sort of use of antitrust, using the words of antitrust, but you are really sort of gerrymandering the market at that point.

So long story short, definitions are important, but I think within each structure you can

work within the existing framework.

MS. WILKINSON: Okay, good.

MR. KANTER: Yes, I think I agree with John. I think the U.S. vs. Microsoft framing of nascent competition is the right way to think about this. I mean, there certainly are important questions about whether product A is a substitute for product B and whether they are existing or potential competitors. And I think that is something that the agencies will look at and, you know, have traditionally looked at.

But when you are dealing with, you know, platform technologies, more often than not these technologies have very strong feedback effects. They have -- they are winner-take-all or winner-take-most. And the threat, the platform threat is likely to come from disruptive technologies, things that get in the way of that feedback loop. And that is, you know, that is really where the nascent threat was the case in the U.S. vs. Microsoft because in Microsoft in terms of the applications barrier to entry.

And if you are thinking about acquisitions or if you are thinking about Section 2 cases and you are looking at nascent threats, it is really important to see it in the context of that feedback loop and understanding the realities of the way the market

functions. That is hard to do. And I think sometimes one of the challenges we have is that we are trying to fit things into market definition boxes like sort of the question, you know, would suggest. I think that often leads to kind of missing the mark in terms of where these issues really lie.

MS. WILKINSON: Diana?

MS. MOSS: Stephanie, can I just add, I mean, this is a good discussion for sure, but on the market definition issue, I think it is important to add that market definition should not be the step one in the merger analysis process.

So if you go back to the merger guidelines, we have heard a lot about the guidelines. I would hope and think and expect that the agencies, given how experienced they are, would be looking to things like direct evidence first when presented with a new acquisition involving a nascent competitor. There have been enough acquisitions as I cited to earlier. There is water under the bridge. There should be lots of observations in terms of which deals have eliminated head-to-head competitors, which deals -- where do we have natural experiments, for example, to see what happened to entry, after an acquisition and even exit. So direct evidence should play a heavy, heavy role

here.

And then I would offer up that the agencies, as they usually do, will have a good theory of harm going into a case before they even get to market definition, right, whether that theory of harm is vertical in terms of classic foreclosure or concerns over coordinated effects or, you know, simple elimination of a small rival in a concentrated market to drive up price. So but when we do get to market definition, which has to be gotten to unless you really have a strong case for direct evidence, that, you know, we would be working very hard and carefully to translate sort of standard economic antitrust concepts over to the more complex digital markets.

So where we have bilateral transactions in traditional markets, we have ecosystems of exchange in the digital spaces; where we have easily identified buyers and sellers in traditional markets, we have suppliers that both sell and compete. So that is more complex.

Revenue generation means value proposition on the digital market side, right. We have prices as metrics of exchange, whereas in digital markets we have eyeballs or attention or information as metrics of exchange, right. So where we have easily identified

products competing with each other and horizontal plays, we might have differentiated platform offerings over on the digital market side.

These are relatively easily translatable concepts, which brings us to market definition which could include any number of relatively narrow markets but also broader ecosystem-type relevant markets that I really genuinely think there could be made a case for that. So simple markets like data, cloud services, connectivity services, content and advertising, those are simply defined markets depending on the theory of harm. But antitrust, I think, has to widen the lens to think about these broader markets that might include connected services not just in adjacent markets, but in related markets that very much are endemic to the platforms and how they create value added for their users.

MS. HUBBARD: Yes, I would just like to second what Diana said about really focusing on the theory of harm. And I think that is really even more important with tech platforms because it is not going to be so obvious where the harm might be as the markets are fluid. And looking at the competitive effects first instead of just saying, okay, this is a market -- as we see it, you know, Facebook is a social network,

Instagram is a photo-sharing app, even though really what everybody did on Facebook was share photos, but it takes just a deeper dive into the competitive effects analysis and the theory of harm before kind of jumping to a conclusion about what the relevant product market is.

And the markets are fluid, too. I mean, they change. They have a lot of different -- you know, as Jonathan said earlier about it being vertical, horizontal, conglomerate. They are multi-faceted.

MS. WILKINSON: Okay. Danny?

MR. SOKOL: A lot of what I would say is covered. So the only thing that I will respond to is a comment that Jonathan raised which is that we may need new boxes. I would actually suggest that the nature of antitrust, both on the law side and the economic side, is that we look at older situations and try to reason by analogy, because ultimately you have to convince the finder of fact, a judge. And it is about how do we make the world administrable.

So what is Microsoft? Microsoft, by analogy, was Lorain Journal, right? What is economics of platforms or economics of new economy? I think Shapiro and Varian's book, Information Rules, was brilliant because it said actually traditional economic tools can

be applied in the setting that we have seen before. And, oh, by the way, let's be careful for how we define markets, right, if we do not define them narrowly enough, we are going to lose.

I am going to actually go back to something that Paul Denis raised earlier, which is the 1982 California Law Review Symposium. I would actually suggest that people reread the work in that symposium by Don Baker and Bill Blumenthal, who made exactly that point back in the day that, actually, we are going to see more enforcement in highly specialized markets.

So what is old is new again, not just Steve's haircut.

MR. KANTER: Could I comment on that because I think this gets to dangerous territory, and I appreciate your remarks, Danny, and respect them greatly. But this is where I think the realities of the marketplace have to be factored and weighed above traditional models or traditional boxes.

So these technologies are transformative in many and fantastic wonderful ways. And, but they have changed industry almost forever, right. And if you talk to people who operate in these markets, the rules of engagement have shifted in so many sophisticated ways that if you are trying to sort of figure out a

model for how competition works and take the realities of these complex markets and put them into those models for how competition works, they are not going to match up.

And so some of the discussion is, well, how do we modernize that? How do we look at -- you know, economics is supposed to help us understand how markets work so that we can make more informed decisions regarding antitrust enforcement. But I would say that we -- one, we need to update those models because a lot of them are a little stale for how markets actually function in today's economy. Two is the technology is really hard and detailed and sophisticated and there needs to be greater expertise really to parse through it. And there has been discussion about a Bureau of Technology or something to start really understanding the impact of data, understanding kind of the feedback effects and network effects, understanding which technologies are likely to impact the feedback loops and network effects.

And I think technological expertise is just as relevant to antitrust as economics expertise, and I would not put it in the Bureau of Economics. I think the Bureau of Economics is important and fine just where it is. But why is one sphere of expertise more

important than another when it comes to antitrust, right? I do not see one as mutually exclusive to the other.

MS. WILKINSON: Any further response on this question?

MS. HUBBARD: Plus one for not putting the Bureau of Technology under the Bureau of Economics.

MR. YUN: So I am going to be -- so you have to be for merger retrospectives and you kind of have to be for a technology group at the FTC. But I am going to say no technology group at the FTC, Bureau of Economics or not, because I think -- you know, technology, I do not know, maybe I am being naive. But I think it is a huge field and every case has disparate issues even within the realm of economics and -- I cannot imagine within the realm of technology.

So having a staff sort of on hand roving to do technology on cases that involve highly technical issues in completely different technological areas, I think it makes more sense to bring in experts early in that field, so let's get a budget ready. It is not about the money. It is about getting the right person at the right time.

So let's not wait last minute, of course, but let's get the right person or expert in that field

specifically. I think we will do a lot better.

MR. KANTER: Economics is pretty broad, though, right. So why wouldn't you have the same approach when it comes to economists and economics?

MR. YUN: Well, IO is broad, but it is reasonably cabined within a certain area. Economics is broad and you can bring economic historians on -- we have in the past -- but they still are guided by basic IO principles of the guidelines and how we assess mergers. You learn your trade.

MS. WILKINSON: One minute.

MR. SOKOL: Since I had the slide on tech, I will just throw in one thing. I think that the advantage of having something within an agency is that you create institutional memory and I think that that is really important.

MS. WILKINSON: Okay. Thanks.

Moving on from product market now, I would like to focus on what kinds of competitive effects and entry barriers should we be most concerned about when evaluating nascent acquisitions in digital markets, especially considering that many of these markets are considered zero price? Conversely, what kind of unique benefits and efficiencies should we credit when evaluating these acquisitions?

MS. MOSS: Thanks, Stephanie. I will stab at this one. But I want to take my time, limited time, to really talk about one particular play. Acquisitions of nascent competitors can occur in all sorts of different plays. It can be sort of off the platform, like a Facebook-Instagram kind of thing, or it can be to the side of the platform or it can be right on the platform.

So I want to focus just briefly on a class of transactions or players that involve acquisitions where the platform is very much involved, where the platform controls critical access to data, for example, to search functionality, to distribution through payment systems, for example, to the ultimate consumer, where there might be network effects that really amp up the market and the strength of the reaction. So this specific class of transactions where you have a platform that may or may not be invested in a particular business acquiring a nascent competitor and bringing it onto the platform. That, I think, deserves some very, very special attention because it is all about access.

There is no entry for that type of nascent competitor because you would have to enter at the platform level at multiple levels. You would have to

create a whole new platform, but that is the business model for these types of rivals. So entry is really not the issue. They are trying to get access to a platform which controls lots of functionality and is really the lifeline and the channel and conduit to the ultimate consumer.

So, you know, that is the kind of thing for which we actually have lots of history and models and data points on conduct. I mean, I know this sounds silly, but I am a former federal regulator and some of my biggest projects in the earlier part of my career were developing opening access rules for electric utility systems, right, where you had a vertically integrated transmission owner and you wanted a small generator, an independent generator wanted to get on the system. They had to get access to transmission. They had to wield their power through the system.

I mean, that is a general model that antitrust and regulation has dealt with. Antitrust should deal with it by getting the antitrust laws right without having to turn to regulatory types of concepts. But the competitive effects that we worry about with that particular play are things like a platform potentially changing the rules of the game, hindering or hampering potentially interoperability, changing

algorithms to make it more difficult to interoperate on the platform.

I think this concept of having your own private label as a platform is -- we heard this earlier in the day -- a really important concept. Think about shelf space in a grocery store where Safeway has its own private label. You have a big food manufacturer, who is the category captain, controlling shelf placement for that particular group of products or services. It is a similar concept, right. It looks like brand competition, but it is really not. It is an illusion of competition, especially when the platform acquires a smaller nascent competitor.

So, you know, we want to talk about data sharing, for example, the use of data, critical access, critical input. Data is a really important input, a strategic asset, to control that, to shape or to control competition in those spaces. So this particular play, I think, is very important to think about and we have some really good thinking in history and models that are framed around the access problem and how antitrust can get to that through merger control.

MS. WILKINSON: Okay. Sally?

MS. HUBBARD: Diana, I am just a little

confused about what you are talking about because I know I have actually spent the last couple years just documenting these instances where the tech platforms are kind of burying and denying access as the problem you are identifying, this access problem.

MS. MOSS: Right.

MS. HUBBARD: Basically denying -- like I say, they are controlling the game -- they are controlling the arena in which the game is played and they are also playing the game themselves. So they can be the platform, be playing on the platform, and then bury anyone else who also tries to play on the platform against them, like bury their vertical rivals on the platform. You know, like Amazon putting its basic product at the top of the search results or Google putting its shopping products on the top of the search results.

But I have not seen many, like, acquisitions. Is there an example? I mean, I see this all the time, this burying, this denying of access to competitors.

MS. MOSS: Right.

MS. HUBBARD: But I just have not seen any acquisitions.

MS. MOSS: Well, I think it is --

MS. HUBBARD: Or I am not thinking of them.

MS. MOSS: No, it is a good question, Sally. So, you know, for example, Google's acquisition of Waze was an acquisition of a smaller rival where Google had that own capability, that own functionality itself. We could find examples in Amazon. For example, Amazon is pushing into drug distribution. That may be efficiency-enhancing given the problems we are seeing in the drug distribution markets and the PBMs. But they are acquiring PillPack, which is going to be a source of important input.

So these types of acquisitions where the platform has their own private label and then there is a nascent competitor and then that nascent competitor is absorbed by the platform, you know, the question is, well, how does that affect competition, how does it affect consumers, right?

And, you know, my argument would be we need to be focusing much more on innovation theories of harm. I heard someone say here earlier that innovation theories of harm are dead. They should not be dead; they should be top of the list. How do these acquisitions potentially stifle incentives to innovate? And I am not talking about the special goose that laid the golden egg and the VC -- venture capitalists or whatever. I am talking about different types of

entrepreneurial models, all of which are valid and absolutely out there.

So we need to be thinking about how these acquisitions affect incentives to innovate and affect consumers in terms of prices and quality and security of their data, for example, as a quality issue, a nonprice competition issue. These are all things that should be considered under a flexible, dynamic, symmetric consumer welfare standard.

MS. WILKINSON: Okay. Would anybody else like to weigh in?

MR. YUN: So whenever I see barriers to entry in the context of this, you know, inevitably something about big data come up. I feel like I am randomly talking about big data. No one really -- I was hoping to play off of it. So I just want to talk about big data a little bit for a moment. Let's just go there.

So what do we mean by barriers to entry? I think there is a problem when we label something as a barrier to entry or not and it is just check a box, it is a barrier to entry. So inevitably we think of sort of the Bain approach to that which then means supra-competitive pricing and durable monopoly power. And I think the definition has evolved, and I will not bore you with the history of the definitional evolution

of barriers to entry. But I think we should really view it as to how the participants in an industry use data in a market and is this a scarce good and are entrants really in need of this and is it -- they cannot obtain it -- what is the history of the market?

So for example, you look at something like search engines, something like Google. It is inevitably going to be brought up that Google and Facebook have big data and that sort of creates and enforces their market power. And then the question is, how is data being used? Is it just the existence of data or is it part of a larger production function along with other inputs? And those inputs are maybe -- maybe big data is a big part of it, but those other inputs are as well, including the algorithm, the quality of the employees and the other technologies that evolve around that data.

Certainly, data is important and you need it, but there is a real question of how much you need it. For example, the nascent competitive threat story, if you need big data to be competitive, why are we ever talking about nascent competitive threats? They would never be a threat; they would never have big data. They are all nascent, they are small. How could they grow up to be competitive?

I reject that. I think we all would reject that story. So I think we have to be consistent and reject the story that big data, in and of itself, insulates big firms from competition. And I think history has shown -- and I will not go through the boring examples that everyone brings out of MySpace and Friendster, which no one uses anymore, and then -- but iTunes and Spotify, a more recent example.

MR. SOKOL: How about Tinder? No, I am going to throw this out there. It is late in the afternoon and I have tenure and I can go there.

(Laughter.)

MR. SOKOL: So it turns out there were plenty of dating websites before -- also, a disclosure, my wife and I met on a blind date thanks to the FTC. So three children later, we call that dynamic competition and innovation.

So let me just say that there were plenty of dating websites. Again we met the old-fashioned way.

MS. MOSS: I do not know, Danny. It sounds like you might have been on some websites.

MR. SOKOL: No, no, no, no, no.

(Laughter.)

MR. SOKOL: So what I would say is the following -- well, fair enough. What I would say is

the following: There were plenty of dating websites before that. They had tons of data. But do you know what they didn't have, a great idea, which is apparently, from what I understand from my students, it is not dating as I would imagine, it is dating in quotes. But this idea was a binary, do I like them, do I not like them? One is them is left; the other one is right swipe. I do not know which one and I do not want to know.

The point is, all of a sudden, it did not matter that Match.com and eHarmony and all these sites had tons of data, they did not have that breakthrough idea. Tinder did.

MS. MOSS: Stephanie, can -- since we are all in example mode here and it is -- you know, case studies are wonderful, especially in this particular conversation. But I would offer, to give Sally even more examples, you know, would be Apple-Shazam. So, you know, the Europeans just took a look at Apple-Shazam and, you know, I would submit that the Europeans took a very narrow market definition. This goes to my earlier moment about not focusing the lens in the traditional narrow antitrust way when a broader market, a market that is not just broad to be broad, for the sake of being broad, but generally encompasses

interconnected, interlinked products and services. That can be defined as a relevant market.

You need a good, powerful, clear theory of harm to back that up if you go down that road, but it is entirely possible. But the Europeans took a very narrow lens on Apple-Shazam. It was a theory of foreclosure that by acquiring Shazam, which is music identification paired up with digital music procurement, that they would have access to data that would allow Apple to target customers to steer them away -- to steer them towards getting the tune, actually purchasing the tune on iTunes, and away from rival, Spotify, for example. Well, lo and behold, Spotify apparently never complained about this. So there has been this real robust debate about why that did not happen, why there was no complaining from Spotify.

But that is an example of sort of a narrow lens around a relevant market, a well crafted theory of harm, vertical foreclosure, cannot complain about that. But how could that lens have been broadened in a way to capture more than just data markets but also capture sort of the end user experience and choice and under a consumer welfare standard?

MS. WILKINSON: Okay. I am going to move on

now unless anybody has anything else to say on this topic.

MR. SOKOL: Very, very quick.

MS. WILKINSON: Okay.

MR. SOKOL: So as we look at each particular case, we should also look to see what is sort of the prior history of the companies. So sometimes when companies make acquisitions, they leave the targets as separate subsidiaries and they do not really mess with them. And that, I think, looks very different than a full integration. And sometimes full integration works and sometimes it does not work, and these are all things that agencies should consider.

MS. WILKINSON: Okay.

So moving on, a key issue for the agencies, when thinking about these cases, is determining when a nascent technology is likely to develop into a significant competitive threat such that we might have concerns if it were acquired by an established incumbent platform. What factors should the agencies consider when predicting the competitive significance of nascent technology firms? How reliable are these factors and how does this issue affect the agency's ability to challenge nascent acquisitions?

MR. KANTER: Yeah, I can start. I mean, I

guess I raised some of this in my opening remarks. I do think there are signs or things that we can -- signposts that we can use to help understand these issues a little bit better, but I do think this is an area where we need better research. We need better rules of the road, so that we can help spot problems sooner and with greater effect.

And I think that is part of my point where we have fallen down because we are so defensive as a community that sometimes we forget to look inward and that is why I think this process and these hearings are so important.

But a few things to look at. One, is it a winner-take-all or winner-take-most market? Does it exhibit strong feedback effects? Are the nascent competitors relevant to that feedback loop? Is the market share really durable and high, in which case you would have a heightened concern? Does it require entry at multiple levels and multiple stages in order to be successful? Does a platform exhibit conflicts of interest and will the transaction change the extent to which it has the incentive and ability to act on that conflict of interest? Those are some of the signposts that I think we should be using.

Also, as I mentioned in the opening remarks

-- and I think this goes back to the comments from Chairman Pitofsky -- we do need to be more sensitive in certain markets that involve speech, that involve marketplace of ideas, that involve information that is vital to our functioning democracy. Those markets are really important just as courts, including the Supreme Court have given them heightened levels of scrutiny and importance, so too should the antitrust laws.

MS. WILKINSON: Sally?

MS. HUBBARD: So some similar points that I wanted to make, which are just kind of some questions to be exploring, you know, how will the acquisition help a tech platform either obtain monopoly power or maintain its existing monopoly power and could the platform get access to new types of data that will fortify its existing monopoly power? So it is not just all data, big data; it is about unique data. And I think that, you know, there is qualitative aspects of data that we need to be considering.

How could the acquisition help a tech platform leverage its monopoly power into a new market? How could the acquisition exclude competition through vertical integration -- tight vertical integration or foreclosure of access to APIs? And maybe that is a type of merger condition that could be used more often,

as to requiring that open -- requiring APIs be made available to competitors.

And, also, as I mentioned before, what is the strategic reason the tech platform is buying the target?

MR. YUN: So when I look at this, you know, my bottom line is we are not going to say anything new that the agencies do not do already. I mean, the bottom line is evidence, evidence and evidence. I sound like Jan Brady, "Marcia, Marcia, Marcia." A dated reference. Nobody is talking about the Brady Bunch any more.

(Laughter.)

MR. SOKOL: Old theory of harm.

MR. YUN: You know, just being in the agency for 18 years and going through this and for any antitrust counsel who has been on the receiving end of an FTC second request or inquiry into these sort of areas and potential competition theories, they will attest that every stone is looked at. You know, I just find it incredible that there is sort of this notion that there are some new areas that the FTC needs to look at in various things. I mean, just the amount of documents, the amount of data that we get, the amount of analysis that we pursue, the experts that we hire,

it is just a very thorough process and I would like to defend the agencies in that respect and I think they are getting it right.

(Applause.)

MR. KANTER: Let me -- and that was Scott Sher there clapping for the record. Hi, Scott.

You know, I agree. Listen, I have great respect for the agencies and the work that they do and having been on the receiving end of many second requests, they are indeed very painful and invasive and the agencies put a lot of effort into turning over stones. So this is not, in any way, an indictment of the work of the tremendous professionals.

But where I do think we sometimes end up is we still end up trying to put all the facts that we are gathering into little boxes. And I have even had folks at the agency say that. Well, here are our boxes and how do we fit these facts and this data into those boxes? I mean, we were talking about -- on the previous panel, Susan Creighton, who I think the world of both professionally and personally, she was talking about a rule of per se legality, so long as it is a product improvement. That does not sound like turning over stones and boxes and figuring out effects; it sounds like saying, okay, there is an outcome-oriented

rule here.

So I think on one hand we do look at a lot of information, we do look at a lot of data. On the other hand, you know, sometimes we do not always know what to do with it in the context of the way these markets work and, you know, we maybe can do better in terms of understanding the realities and the way these marketplace work so that we can appreciate the significance of the data and so that we can appreciate the significance of the massive amount of information that the agencies are considering as part of a transaction or a conduct investigation.

MS. MOSS: Stephanie, can I just provide yet another mundane, nondigital market example to illustrate a point? And that is actually the Maytag-Whirlpool merger, which is now, you know, an old merger. But that merger was allowed by the DOJ. It created an enormous market share for Whirlpool in white goods, something close to like 80 or 90 percent. But it was allowed through because of the -- essentially the nascent competition from the Asian white goods producers, so LG, Samsung and Haier, okay? So DOJ let that merger through on the roll of the dice that the nascent Asian competitors were going to get into the market and discipline the market.

You know, there is a fact pattern there that would be very useful to port over to the digital market side. How were the Asians going to be competitive? Well, they were going to have to get access to distribution in the United States. Getting access to retail distribution is really, really tough. There is an analogy to that when you interoperate on a platform or you are acquired by platform. You have to get access to shelf space, you pay slotting fees, you have to develop brand recognition and brand loyalty.

So all these factors go to supporting the notion or a set of parameters for determining whether a nascent competitor is enough of a threat. And it needs to be thought out. I do not have all the answers, but it is a tough, tough question, I think as we have heard all day here. What I hope we do not end up doing is coming up, ginning up a bunch of bright-line tests for what is determinative of what is a nascent competitor and their competitive impact, potential impact or influence.

MS. WILKINSON: Okay, thank you. We have about a minute and half left and I am going to give the final word to Danny on this topic.

MR. SOKOL: Thanks. I will be very fast because I do not know how to speak not fast.

So this is really hard to do. And if it were really easy, we should form our own VC fund right after this session. And the reason I say that is the VCs have better information than the agencies ever will. They have control rights. They are in the company every day. They are firing the CEO often before we get to some kind of exit. More often than not. That is why Andreessen and Horowitz found a gap in the market to have a different model.

Okay. So what does this come down to? If we are a VC, we look at team, this is something that Will talked about; we look at market, that is something that Bill talked about last session; we looked at scalability, I think that is something everyone has talked about. And it turns out it is so hard even with all of that, most of the returns on venture capital come from the top 5 percent of all VCs. Now, of that 5 percent of VCs, more than half of the companies, in their given portfolio for any particular fund, have a return on investment of zero. So they cannot even get it right. Because if it was that easy and they are seeing the best companies and they cannot make the good bets, it is not easy for the rest of us.

So I am going to go back to something that -- the first part of what John talked about,

agencies work very hard to get this right. Absolutely. Now, the second part of, like, should we be thinking about broader categories? We should be thinking about whatever will give us better information to make better decisions. I think we can all agree to that part.

And it is all about getting that information to -- in very, very tough situations, can we get it right? And a lot of times, it is not clear that the people who make a ton of money on this can get it right. So I would say let's keep expectations at a realistic level.

MS. WILKINSON: Okay. Thank you. I think we are done.

So, everyone, please join me in thanking our panel for an excellent discussion.

(Applause.)

MS. WILKINSON: And if everyone in the audience can please remain seated, I think we are going to do a quick transition to the final panel of the day.

(End of Panel 4.)

PANEL 5: NASCENT COMPETITION:
INVESTIGATION AND LITIGATION CONSIDERATIONS

MR. MOISEYEV: We're going to go ahead get started. Our last panel of the day, discussing nascent competition, is to take on the very real-world problem of how you go about identifying cases that actually raise competitive concerns and then how you challenge those cases and certainly focusing on the world of mergers and acquisitions.

For that, I am joined by a panel of very talented antitrust lawyers, people I've worked with over many years in my career, and several of whom have held top positions at the FTC or Department of Justice. To my immediate right is Rich Parker. He's a partner in the D.C. office of Gibson, Dunn and was formerly my boss, Director of the Bureau of Competition.

Next is Debbie Feinstein. Debbie is a partner in the Arnold & Porter law firm. She also was a former boss of mine as Director of the Bureau of Competition and held other positions in the FTC.

Next to Debbie is Dave Gelfand. He's at the Cleary Gottlieb law firm, and he was former Deputy Assistant Attorney General at the Department of Justice. I did not work for Dave.

Next is Ray Jacobsen. Ray is head of the

McDermott, Will & Emery antitrust practice. And then -- now I'm losing sight of the order here, but it's Andrea Agathoklis Murino. She is with Goodwin's antitrust group here in D.C., former attorney advisor to Chairman Kovacic at the FTC.

And then Scott Sher at the very end, he heads up the antitrust department at Wilson Sonsini. So a tremendous group of litigators and antitrust lawyers who I hope will help us shed light on some of the really complex issues that we've talked about over the course of the first couple of panels this afternoon.

Scott, to start things off, can you explain to me from a practitioner's perspective what we're talking about when we're talking about a nascent competitor? Is that just a potential competitor, or that something else?

MR. SHER: Sure, Mike. I don't think that there's much of a difference from a practitioner's perspective, but obviously there are case law differentials. Potential competition is defined in case law as either actual potential competitor or a potential potential perceived potential competitor or a potential potential competitor. And whereas I think it's correct, the last panel talked about nascent competitor being generally described as a company that

has a promising technology -- this was from the Microsoft case -- that may or may not be able to bring that technology to market and may or may not need assistance in bringing that technology to market.

From a practical perspective, in most deals where you're dealing with small technology companies, you tend not to define them as potential competitors just because you have the framework from the guidelines that gives you less flexibility as to how to characterize them. And more often than not we define these small companies that have interesting and important technology potentially as nascent competitors.

MR. MOISEYEV: Debbie, does that make a difference in how the agency or how you would analyze a merger?

MS. FEINSTEIN: Okay, so first, it's a little funny to be having Mike ask the questions rather than answer them because he's thought about this more than any practitioner since much of what the division does is potential competition type cases in pharma and elsewhere. So a couple of points.

You know, we all think of Section 7 as requiring some degree of likelihood that it will lead to problems, and so where on the spectrum you are is a

little unclear, and there hasn't been a lot of case law. We tend to use the word “nascent” when we're talking about a Section 2 Mallinckrodt-type case, no particular reason for that. So I agree that some of the terminology gets blurred and that it's really not that important to talk about the technology.

What you're talking about is what's the status of the acquired firm. Let's call it acquired firm. It could be the acquiring firm who's the new technology person, but what's the status of the acquired firm and what will be the affect on competition if it's acquired by the entity that it's being acquired from, and the labels we put on it.

And I think if you go and back look at the complaints during the time that I was there, I'm not sure we ever used the phrase “potential competition.” We used the phrase “future competition” because in the pharma world it's not's so potential. Once somebody has actually filed with the FDA, the likelihood that they're actually going to come to market is extraordinarily high. So we would talk about future competition.

I will say one thing. I've never figured out how one could actually ever bring a perceived potential competition case because the moment you bring it, the

acquired company is going to say, well, that's kind of crazy that they perceive us to be a competitor because we're not doing anything. And once that fact gets out there, you've changed the market landscape just by bringing the case. So I think that's one of the reasons you don't see a lot of perceived potential competition cases.

But fundamentally the labels you put on it aren't the question. The question is, what's the competitive impact going to be and then -- and we'll talk about this more -- you know, how would I prove that there's going to be that impact. I don't think that the box is all so narrow of the information that we're putting it in. You know, the guidelines tell you, you don't have to start with this methodical, what's the market definition. You're asking the question of are things going to be worse for competition and consumers, and I think the box is pretty big to put a lot of stuff in to get to that question.

MR. MOISEYEV: I should have mentioned this at the outset, but this panel is a little different from the previous ones. We're not sort of having introductory comments by everybody and rather just jumping in to questions. That also means that there's

greater opportunity, hopefully significant opportunity, for audience participation here. So as we go along, please submit any questions that you have, and we'll try to take them on, time permitting, as we go through this.

So with that said, I wanted to raise the question of whether there are any special attributes of high-technology markets that affect merger analysis. We've spent a lot of time over the course of the last few days talking about platform competition, and some of the attributes of high-technology markets are certainly focusing on mergers.

Andrea, can you shed some light on that question?

MS. MURINO: Sure, I'm happy to. And I just wanted to thank Mike and everyone in OPP for organizing and for having me here today. I agree with what Debbie said, that the purpose here is really all about getting to what the competitive impact is. But I think fundamental to that is understanding that there are some differences when you're looking at certain kinds of high-tech deals.

And the one word that always pops into my mind is speed. And the pace of play here is just different than it is in other industries. And I think

that has a very meaningful effect on the way that the agency has to go about gathering the facts and assessing the evidence. These markets can be very fickle. These markets are capable of being appended quite quickly, and because of that, some of the data that we provide to the agency, to the DOJ as well, by the time you provide it, it's already old, time has already passed.

And so when I'm working on behalf of clients trying to explain competitive dynamics, I find that that's one area where you have to really make sure everybody is on the same page. If there is not an appreciation that things can change on a dime, you're not really able to look at the nuts and bolts of the market in a way that I think is capable of making an accurate prediction, which obviously is what you're trying to do in a merger case.

MR. MOISEYEV: Well, if that's the case, is nascent competition something that raises particular problems in these rapidly evolving markets?

Ray, do you want to weigh in on that?

MR. JACOBSEN: Well, the answer is certainly nascent competition is more important in high-tech markets than in bricks-and-mortar markets because I think in high-tech markets, as we've been talking about

throughout your hearings, your concern is innovation. So going back to what Paul Denis was teaching us earlier, you have to ask a bunch of questions, you know, how serious, how substantial is this particular nascent competitor. If they're unique, if they're special, that's one thing. If they're one of a handful, then the loss of that one is not such a factor.

Your question talked about the evolving nature of the market. From looking back at all the cases that have been investigated to my knowledge over the last ten years, the dynamism of high-tech is very, very important. And we've seen major companies make acquisitions but have them approved or not challenged by the agency because of the dynamic nature of the industry. So I think there's a strong defense, the dynamism defense, to the concern, but it's clearly a concern in any high-tech market.

MR. MOISEYEV: So over the last couple of panels, the notion has been raised that the agencies really are not -- or lack the capabilities of fully appreciating the nuances of how these markets work.

Andrea, can you give me an idea of what kind of information the agency should be prioritizing when they're looking at a merger in one of these markets?

MS. MURINO: Yeah, so I don't recall exactly how you phrased that. I don't think it's an issue of -- that the agencies aren't capable of understanding. I think this is really hard to do. And I think that what is very meaningful and what is very helpful is being able to talk to business people. That's probably the number one thing I would say that is a little bit different from some of the more brick-and-mortar industries where you have companies that have spent a lot of time developing strategic plans, they have full-blown corporate development units that think about corporate strategy for the long term.

Here, you know, some of the folks that I work with, there's just one guy that has an idea and he doesn't write anything down. So from my perspective it's a challenge sometimes to get the agency to really want to listen to that one guy's vision because the agency immediately assumes that it's just self-serving and that they're just saying whatever needs to be said to try and get the deal through.

And I think that that's not always the case. I think that a lot of times, because these markets move so fast, because things change so fast, you really do have people who are the key intellectual asset that will tell you what the future is going to look like.

That's one category of information I would encourage the FTC to more willingly embrace.

It's when I bring in that guy or that woman that is going to be able to explain to you what they're thinking and what they have in mind, it's not because I've spent hours prepping him or her trying to tell them all the buzzwords. It really is because this is the person that has all the information in his head.

Now, that said, there are lots of documents that are around. I mean, Scott and I were involved in Bazaarvoice. And everyone will remember what those documents looked like. We were just talking about that with David. But I think that, you know, looking for the traditional asks are also perfectly appropriate.

I also like some of the ideas that came from the earlier panel with John Newman and Lina Khan. Lina mentioned usage level of rival apps. I'm not sure that that's a level of data that people really think about when you get into certain kinds of deals, but that could be meaningful.

And I like John's suggestion for A/B testing. Now, all that data does come in in certain deals, and I've seen it at the DOJ, I've seen it at the FTC. I think what would be helpful is for the FTC perhaps to develop a more standard ask of some of these high-tech

deals and say, okay, if you're doing a pharma deal, when Mergers I sends a voluntary access letter, we know exactly what they're going to ask for before they send it. They're experts. They have signaled to the market, to people like my clients, what they're going to want to know.

I don't think we've had the same force of messaging when it comes to some of these high-tech deals. So I think that maybe coming up, spending more time revising what the voluntary access letter would look like in a high-tech deal, to include some of these more odd requests, would be something that could be useful.

MR. MOISEYEV: So speaking of that, we've had actually some remarkably spirited debate about whether the FTC should have on staff technologists or technology experts, either embedded in the Bureau of Economics -- nobody wanted them embedded in the Bureau of Competition, which I think is sort of remarkable, but -- or a standalone group.

What do you think -- maybe, Andrea, if I can stay with you for a second -- can you tell me what your thoughts are on that?

MS. MURINO: Yeah, I think it's a good idea, and I'm not quite sure where some of the hesitancy

comes from because I think if you look at -- again I'll just use Mergers I since Mike is up here, you know, we all know they're pharma experts, and they are really good. That staff is really good at pattern recognition. You don't have to explain certain fundamentals of the industry to them because this is all they do day in and day out.

I think having a tech team at the FTC perhaps modeled, perhaps not, after what the DOJ has in their -- I guess they call it Technology and Financial Services now, what was Net Tech. But I think that that's a good idea. I think that anytime you have people who get exposure to the same issues again and again, they become faster, they become more able to analyze things more quickly. I think it becomes just a more efficient work stream. So I think that would be valuable.

I had never thought about Danny's idea of hosting them in BE, but I think that's something to be explored, for sure. And I certainly would, you know, I think appreciate the value of the specializations. People ask me all the time, can you look at my will, can you do my tax returns, and I always say, I'm not that kind of lawyer. So why not have an FTC shop that says, yeah, that's kind of the industry I focus on.

I recognize it's broad. I recognize there are difference between not all tech deals are the same, but it just seems to me that there's a value there in having people who have Google Alerts set up to get breaking news about certain industries, and that's what they think about day in and day out.

MR. MOISEYEV: Well, I think as John Newman said, I guess you can't be anti-technologist, or maybe you can.

Debbie, you worked -- you headed up the Bureau. Tell me what you think about that.

MS. FEINSTEIN: Yeah, I don't get it. So, you know, Mergers I doesn't have any pharmaceutical experts. Last I checked, they don't have anybody who went to pharmacology school. They're lawyers. They're really good lawyers who dig into the facts of each case and have developed learning about how the industry works from working on those cases. But I don't know what a technologist does that would apply to the vast number of industries that we're talking about that are high -- you know, that are technology-based, that are fast-moving industries. And I also think that once you become a government employee in Washington, D.C., your connection to the tech community that might give you the ability to really have your hands close to what's

going on might just, on the margin, diminish, is a guess.

The way the agency deals with that is to talk to anybody it can, and it does. That's one of the great privileges of being in the Government is you pick up the phone and, for the most part, people talk to you. Professors will talk to you. Experts will talk to you. You can get most of the information for free, although if you really need to hire an expert because you want them to testify to something or to consult with you on something, there is a budget for that as well.

But I think the number of technologists that you would need to make a difference, to have somebody for each of the technology areas that the Government would look at and the fact that you may go six months without a case in that technology area coming up, so what would that person do? I really just don't think it's the most effective use of resources.

To the extent that somebody thinks that there is information out there that the agency isn't getting and the kind of person and where they should get it from, that's something to talk about, and it would be interesting. I haven't heard somebody say, oh, you know, in this investigation, the FTC missed talking to

these kind of people at these kinds of companies and, therefore, they missed that the future was here and they thought the future was there. I just haven't heard that kind of criticism.

So I'm with John on this one that I don't think that's the most effective way, if there is an information gap to fill it.

MR. PARKER: You know, I have an opinion, and that is I was Bureau Director when they started the patent group, and I think that was a big success. And these were lawyers in the Bureau of Competition, and I think they immediately contributed. I think that if I was an enforcer and I saw all this talk about platforms and nascent this and all this technology, I would want a lawyer in the Bureau who has broad experience in dealing with tech industries, who knows what questions to ask, who's had experience, who has represented startups, has represented big companies, small companies, just that experience so there would be somebody, when we're charging up the hill here, I could ask, do you think we have all the right data and do you think we can win this?

And I think it would be helpful to have somebody who had broad agency experience in the tech area to duplicate what Merger I has, for example, in

pharma. That's just -- I mean, if I was in charge of this, that is exactly what -- that's exactly what I would want. I would want to go hire a Scott, there you go.

MS. FEINSTEIN: But you're talking about a lawyer.

MR. SHER: Right, right.

MR. PARKER: That's what I'm talking about.

MR. SHER: Yeah, I think there's a difference between lawyers and technologists. And not to be apologist for the agencies, I think that there are probably 50, 75 lawyers within the FTC and DOJ currently today who understand technology markets extraordinarily well. You have platform markets in real estate, for example. You can go talk to Jessica Drake who's done a number of the large deals there. You have a question about Google, you can talk to Stephanie Wilkinson or you can go talk to Barbara Blank. These are people who understand generally what to ask for and the sorts of information that they need to accumulate when they are conducting an investigation into one of these markets.

I personally find it to be scary almost to consider having actual technologists at the FTC, for some of the reasons that Debbie had mentioned. There

are not enough deals in any one given tech market. Tech is not a market, by the way. If it was, then every deal can go through.

There are many subverticals in technology. There are many subverticals in search. There are many subverticals in advertising. You can't ask somebody who's an expert in one of those verticals to analyze code in another vertical and say, was this written properly.

The other problem is, and the really scary thing from my perspective is, if you have technologists who you're asking to go back and look at code, you're asking a technologist in some instances to go back and look at code that may have been written 15, 20 years ago and had been altered over time to accommodate specific problems that existed at the time that the code was written, that somebody is analyzing today with a gloss that's completely irrelevant to the time when code was written.

So how did you solve that problem? Well, I think you solve that problem the way you solve the problem in every single merger review. You look at the documents; you look at the developer notes at the time they were written. So instead of going back and trying to discern what the source code is, every single

developer who writes code keeps a journal and says, this is the code I'm inserting, this is why I'm inserting the code, and they're not thinking, well, in 20 years I might be investigated by the FTC, so let me not tell the real reason why I'm doing it.

They actually say, I'm doing it to solve this problem, or I'm doing it to frustrate this issue. So go back and do what you would do in any single deal. Talk to the engineers, review the documents, talk to the executives, talk to industry experts. Again I think -- you know, I've had the good fortune of working on a lot of the deals that have been mentioned today involving, you know, in Google-Waze, Zillow-Trulia, Google-AdMob, FanDuel-DraftKings, Bazaarvoice. Some of them have gone my way; some of them haven't gone my way.

But what I can say is that the agency analyzed the deals correctly in every instance. I might not have agreed with the outcome. Maybe I think that they've weighed certain factors differently than what I would have weighed them as. But all the things that people have been talking about over the course of today, the agencies do already and they do it quite well.

A/B testing, well, I can tell you that, you

know, in an investigation with Barbara Blank, we probably produced 10,000 A/B tests to staff, and they reviewed them all. So, you know, the agencies -- trust me, the agencies understand how to analyze these deals, they're doing it in a way that's consistent with merger policy and with the law. And to contemplate changing because we're dealing with something that's called tech, I think, is dangerous because they're really: Sure, there are unique characteristics of technology; there are unique characteristics of grocery stores; there are unique characteristics of pharmaceuticals; there are unique characteristics of defense industries.

I think the intense focus on technology, in my opinion at least, is misplaced. The agencies are doing a pretty darn good job in analyzing these deals, and I don't think that we really need to change the way they're doing it. To the extent that people have fundamental problems, to me, it sounds more like a legislative concern and people want a different standard to be applied to the review of technology deals, but that's not a job for the FTC or the DOJ. They're doing it right. If you have a problem with that, you got to go to Congress.

I'm sorry, I might have gone off a little bit.

MR. MOISEYEV: Any comment that ends with "call your congressman" is fine by me. Having wrestled that issue to the ground, maybe I'll move on to sort of more substantive issues and away from the process.

Debbie, you and I have talked many times over the years. I'm going to jump back into the boxes of antitrust, that is unfortunately the world, I think, that we live in. And looking at a potential competition case, I think most of these, in my experience, revolve around how likely the entry has to be before it raises a competitive concern in a merger case.

What is your sort of sense of how likely the entry has to be to trigger a Section 7 issue?

MS. FEINSTEIN: Yeah, so, I mean, the courts haven't really given us a lot of guidance on this. So in some ways that's freeing to the agencies to say we're going to figure out the level of likelihood that seems right to us, you know, until the court tells us otherwise. And I don't think that the Commission staff follows the BAT clear proof standard unless you define clear proof as something different than I do, which is absolute certitude, 100 percent, and there's no possible obstacle that in the next two years until the product is on the market something could go wrong.

I mean, if that's the definition of clear proof, that is clearly too high a standard. But it's got to be something more than a case I worked on once that ultimately did not go -- when I was on the outside and the staff did not end up proceeding with it, but it was somebody very low level thought of entering the product and the staff's theory was, well, you really need to be in this product because others in your space are in this product. I mean, that's not sufficient to go on.

You know, what you want to see is that there's a bunch of evidence that all points the same way, that there is, you know, an intent to enter and that it's at a fairly high level, that there are people high enough in the decision-making chain to have made a decision to put real investment and effort behind something. You know, by definition, future entry is not certain because something can always go wrong. But, you know, are you taking clear steps to it? Are you putting real money behind it? Are you talking to customers about it?

I always found it sort of astonishing when people would come to us and say, oh, no, no, no, we're really not going to enter. But it's like, you're telling your customers you are, you're entering into

contracts with them. How can you come try to tell me that you're actually not making real steps to enter this? So I mean, it's a bunch of different factors that really go to the question of, you know, does the evidence point in one direction as opposed to another direction. It's really the question of why in pharmaceutical deals we look at things that are fairly far along, not when there's just a named molecule because there's so many things that could go wrong. We don't say that it's likely and because the investment hasn't been made.

But I think that for the most part there's not a whole lot of confusion about the kinds of cases that will raise questions of potential entry, future entry. So I don't worry that there's some big gap in the -- you know, between the outside lawyers and the Commission staff as to what it is we're talking about when we're talking about entry likelihood.

MR. MOISEYEV: Well, let me take that a little bit further because if the evidence sort of has to point one way or another or that there is some significant probability of entry, doesn't that necessarily mean that you're going to lose the ability to challenge potentially anticompetitive deals where the entry is less certain but is greater than zero?

Dave, do you want to take that question?

MR. GELFAND: Yeah, thanks, Mike. First of all, let me begin by also thanking Bilal and Stephanie and Elizabeth and the policy group for organizing these hearings and also for inviting me, especially for inviting me to participate on such a great panel with such great fellow panelists. I'm grateful for that.

So, Mike, you know, this is something that I think is addressed in the case law. I think it's addressed by the standard -- the burden of proof. I think it's addressed in the Guidelines themselves. Section 1 says merger analysis "requires an assessment of what will likely happen if a merger proceeds as compared to what will likely happen if it does not." And I think it's a dangerous thing if you start going down the road of saying that, we're going to have situations where something is not more likely than not, but we're worried about it. And we create a law that allows the Government or a plaintiff to go into court with a nebulous standard of worry.

I think you've got a burden of proof, you got to proof by preponderance of the evidence if you're a plaintiff that the transaction is likely to substantially lessen competition. And doing that means proving that the entrant is likely to come in for the

most part.

Now, a couple of things. I want to pick up on one thing that Ray said, which is you have to think about the uniqueness of this potential entrant, this nascent entrant. And one thing that I think was a little lost in all of the discussions that I've listened to today is we talk about large companies buying nascent competitors but very little discussion about what the other nascent competitors are out there. Oftentimes, these are markets where ten companies have entered in the same way.

And so there also has to be some uniqueness about the nascent competitor or the potential competitor that's being acquired. And, Mike, when you guys looked at Google-DoubleClick, you -- and I worked on that, I should just say as a disclaimer, but you pointed that out in your closing statement that there needed to be some uniqueness there. And so I think that's another important dimension to this.

Let me also say that I don't think we need special rules for nascent competitors in certain types of tech businesses. I know that just echoes what a lot of other people have said, but I think maybe I'll make this point. And this actually picks up a little bit on Scott.

Lawyers in the Government are damn good at looking at these cases and damn good at building cases based on the documentary evidence, the data, testimonial evidence. They have enormous power to compel testimony in the investigative phase. And you're good at doing it. And the one thing I would say is you're even better than you think, because I think you could make these decisions a whole lot faster.

And if I had one thing to say to the agency on this panel, I would say that this does apply especially to some of these technology markets. You've got to make these decisions in fairly quick order. Sometimes the markets are dramatically affected simply by holding up a deal for a year during an investigation and then another six months during litigation. Get your investigation done in three or four months. You can do an enormous amount of work in three or four months. You can get a lot of documents, you can get lot of data, you've got big teams that work on these cases. And that's the best way to enforce the law in this area, not try to create a special standard or, you know, sort of put the thumb on the scale.

And by the way, one other thing. Why would you create a special standard for an area of competition that is the most speculative? It's the

hardest one to say there's actually going to be harm. Are we just trying to create rules that make it easier to bring cases? That shouldn't be what's going on here. You should live by the rules that exist. If you can't prove a case, then go out and develop better evidence about what nascent competition means, about what the effects are. Do the kinds of studies that some of the panelists today have talked about doing.

But you got to do more than just come onto panels and talk about it. You have to publish your results; you have to convince your peers in the scientific area that you practice in, whether it's economics or technology. You got to convince them that there's some consensus around the science that you're developing so that you can then take it to judges and admit it under the rules that apply to expert testimony. So that's what's going to have to happen, not create a new standard that just makes it easier to bring the cases.

MR. MOISEYEV: Wow. So I'll remember that next time I call on you, Dave. I appreciate the admonition that a little harder work on our side is all that's necessary to get to the prompt resolution of your client's cases. We should have had Paul Denis up here. He would have been the Grecian courts telling

you how that's the singular metric to measure agency performance by.

Let me, let me shift to something that really is at the heart of any antitrust case, and that's how do you measure effects. So all of these cases boil down to what's your story of anticompetitive effects. And in a potential competition case, you don't have necessarily the historical experiences to draw on that often color a lot of these cases.

What do you do -- I guess, Scott, I'm going to call on you, even though it's sort of unfair because I'm going to ask you to explain the government side. If you're trying to prosecute a case, what kind of effects evidence would I look to try to show that these transactions are anticompetitive in the absence of that type of historical experience?

MR. SHER: Right. So that is one major difference between transactions in these markets and transactions in traditional brick-and-mortar deals. A lot of the competitors don't really have a track record of experience. But like what I've been talking about before, the same tools that are available during investigations in these potential competition or nascent competition cases that are available in traditional cases actually do work.

So what are some of the things? Why does the acquiring company want to acquire the nascent competitor? What is the procompetitive justification for doing it? Is it output expanding, or are they concerned about whether or not the company that they're buying represents a potential competitive threat to their position in the market?

And I'll give one example. In Facebook-Instagram, which again I think that the agency analyzed using the correct framework, I represented a third party in that case, so I had a vested interest in maybe concluding that the transaction was problematic. But if you look at what Mark Zuckerberg actually told his investors at the point of time when he wanted to acquire Instagram, which was on the eve that Facebook was going public, he stated that it was a defensive acquisition in order to make sure that Facebook remained in the competitive position that it was in before.

That's pretty compelling evidence as to, one, why a transaction is being contemplated; and, two, what the best expert in the industry, the incumbent firm, believes is potential effect of the transaction. So I think again the most important evidence in technology deals is the same evidence that's available in most

other deals. Why is the deal being done? What do ordinary course business documents say? What does the potential competitor believe that its position is going to be going forward in the future? And what do other people in the industry believe that that potential competitor represents?

Just staying with the Facebook-Instagram example, one potential thing that you might want to look at, and it's something that Andrea had mentioned before, is what are the usage statistics of Instagram. There were 10 or 11 or 12 other photo-sharing applications that were in existence and relatively similar in funding size to Instagram at the time that it was acquired by Facebook. What were the usage statistics? It's interesting, if you looked at the mobile usage statistics of Instagram versus some of the other competitors that were available on the market at the time, Instagram was actually doing pretty well.

Now, there were substantial challenges, and I understand why the agency didn't bring that case. Instagram had been founded less than 12 months before, Instagram had 11 employees, and Instagram really had come up with the photo-sharing app. So it is a really difficult case to prevail on if you wanted to bring a case like that to court.

But if you're considering what are the sorts of things that I should be looking at in deciding whether or not a potential competitor is relevant, they're there. You have the evidentiary tools to decide whether or not on balance it's worth bringing the case or not. And, again, the agency gets it right. You guys look at the right data. You know, you might not weigh it in the same way that I would have weighed it, and you might have, you know, a conflict as to what is the proper enforcement role of the agency. Should you intervene early to ensure that as many as competitors can develop as possible? Or do you allow the market to operate the way it would absent regulation? And that's a philosophical reason to block or not block a transaction, and that really just goes to whether or not the decision-maker weighs the evidence in the same way that other third parties would.

So, again, Mike, that was a long answer, but you don't have the pricing evidence, you might not have the market experience evidence, but there are indicia that exist in these markets to determine whether or not you think it's likely that a company that is developing is going to be successful going forward.

MR. MOISEYEV: Thanks, Scott. And I do want

to spend -- we'll spend a couple minutes talking about some of these cases specifically. I think that would be helpful to hear from you guys. And maybe we've already had the preview on Facebook-Instagram.

I wanted to quickly ask Dave about whether it would make sense from an enforcement perspective, whether we should have presumptions in potential competition cases. So we, in the normal Section 7 case, you establish a market, you establish market shares, the Government has made its presumption. Now, you don't have that tool available in potential competition cases, and the real question is whether that would be something that would make this a more predictable and sort of a little less wild west area of the law.

MR. GELFAND: Well, I don't think there should be a presumption. I know that probably doesn't surprise you, but I don't think we have enough experience, and nobody has articulated what are the characteristics of a potential competition case, that you can look back on a body of experience and say, well, here is a certain set of characteristics and those usually result in anticompetitive effects. There just haven't been enough cases litigated. It's a little bit like the Supreme Court saying the per se

rule should only apply once you have a certain body of case law, finding time and time again that something is anticompetitive.

And it's not just the absence of cases finding anticompetitive effects that you can say there's enough there to create a presumption. But as far as I know, an awful lot of these transactions are procompetitive for the reasons other people have discussed. They give small entrants like Instagram at the time Facebook acquired them a platform. They give it technology, synergies; they give it capital, engineers, distribution. And so how are you going to create a presumption in a set of cases where, you know, arguably most of the transactions that we're familiar with have actually been procompetitive.

So I think it's very different from concentration measures and existing competition cases.

MS. FEINSTEIN: If I could interject, I think we kind of do have a presumption, which is the concentration measures. I mean, a lot of times, what we're trying to predict, maybe not as perfectly as this, is the HHI is, is it one of only a few entrants, you know, is it going to be four to three, is it going to be three to two? I mean, that's what we do -- what we did when I was at the agency in the pharma mergers.

So I think just broadly there are presumptions, but they're totally in line with do we think this company is going to come in and be significant because if it's market at 1600 and we think that the entity coming in is going to get a 2 percent market share, well, then, we don't worry about that.

But if we see lots of evidence that this is a company that's going to come in and take the world by storm and have a really big market share, then I do think we do. So I don't think we need new presumptions because I think we're sort of -- even though we may not always articulate it quite as clearly -- we are thinking in terms of the concentration levels and market structure issues that worry us normally, and we're just sort of applying the same but trying to get at it with different kinds of evidence.

I mean, when you look at the cases that we did when I was there where I just remember those better, you know, the evidence would suggest that companies -- multiple companies were thinking about the industry and the impact of a new entrant the same way. You know, in Mallinckrodt, there were two different companies that maybe were going to acquire the assets of the acquired entity that instead got bought by the dominant firm and both of them had very similar

internal documents in terms of how quickly they could get to market, what the market share was going to be, and what the price effect was going to be.

And that's pretty good evidence, and it fit into the, okay, there's only a couple of people who are going to do this. It's going to have a significant market share, and we're able to show the actual affect on competition because they have both predicted very similar to each other what price they would be able to come in at, what the uptake would be, and, therefore, how the market would react.

MR. GELFAND: Okay, so I've been on approximately one million panels with Debbie, and I've never disagreed with her before, but I have slight disagreement. What you described is not a presumption. It's proving the case. Okay, once you carry your burden of proof and you demonstrate anticompetitive effects, fine, then the burden obviously shifts to the other side to rebut that prima facie case. But I think that's different from --

MS. FEINSTEIN: Fair point, but to just say one more sentence, which is, I mean, I really don't think there's a presumption in the normal horizontal case because if you think that anybody at the agency ever sits down after they say, “and the market shares

are, you know, in the highly concentrated range, I'm done, Your Honor," you're just -- you haven't listened to a case lately because they always go on and do the rest of the analysis. So I do --

MR. PARKER: Yeah, but it sure gets you off to a good start in court, having been on the other side of those cases.

(Laughter.)

MR. PARKER: Your Honor, this thing is presumptively illegal. We got the presumption at this table; I don't know what they have at the other table, but it's not a presumption. That's a good start.

I think that antitrust is an interesting kind of common law because it moves with economic learning. And, I mean, Philly Bank was based on certain economic learning at the time. Query how long that's going to last. You look at Legion, antitrust law moves with the economics. It just does. But what I've heard today is we do not have enough information to create a special presumption in this area. So I would say, no, there should not be any presumption here because we don't know what it ought to be.

MR. MOISEYEV: Well, let me sort of move even further out on the limb, and that is I think John Yun called it the potential potential -- maybe there were

three potentials in there before he got to the competition part of the case, so mergers involving firms, both of whom are developing products for a market that has yet to come into existence.

Ray, is that the kind of case that is out of bounds for antitrust, and if it's something we should go after, how do you go about doing that?

MR. JACOBSEN: Well, I think there would be two questions that the agency would have to prove to challenge it. One, that there is an unmet need that is going to come into existence; and, secondly, that you have the two merging parties that would be two of the strongest competitors. But I think both agencies have done this a lot.

I mean, Rich and I have worked in the Defense industry and, of course, there most of the products are in the future. They don't really know what's the next generation of satellite or weapon system. But what they're concerned about is if we do a next-generation satellite, you know, are the two merging parties the strongest competitors? So that issue, I think, would apply with equal force to the high-tech industry.

If you can find that the two merging parties are, from their documents and their people and third parties, the most likely competitors for an unmet need,

and you have to identify what that is, and it needs to be in the reasonably near future, then clearly I think that's an easier case really, I think, for the agency to prove because it's got substantial facts about the merging parties and what they can do so they can focus on, okay, how do we articulate what that unmet need is.

MR. MOISEYEV: Let me shift away from -- I'm sorry, Debbie, do you want to weigh -- so we faced something like that in Nielsen-Arbitron. I don't know if you had any thoughts of the challenges. That was a case we did together.

MS. FEINSTEIN: Sure. I think it really depends on the facts of the case. Sometimes it's very easy because you can define the market. You know, the only two companies developing a generic pharmaceutical product, I mean, that is a really easy case to bring, right, which is why they always settle, because you can clearly define what the market is. It is the generic, you know, whatever.

Sometimes, and Nielsen-Arbitron was one of them, and if you go back and look at the complaint, it's a long description of the product market. One FTC economist once told me that I probably was on thin water if I had too many dashes in my product market definition. And Nielsen-Arbitron comes, you know,

close to that in the sense that there were a lot of adjectives, but it's how the customers described the market to us.

And so, you know, it's going to be tougher when there's, you know, a debate about how exactly do you say what it is that's being developed when it isn't done. I don't think that ought to keep you from trying to say, hey, look, this is the problem that's being solved. And in that case, it was a problem that was being solved, which is bringing together data from, you know, TV viewers and radio viewers and online viewers and putting it all together.

I think it's an articulation issue. And, you know, that's always tougher for, you know, to have to tell a story in court, but it can be done if you have the facts to show, hey, this is what they're out touting to the marketplace they're going to do, and customers are saying, yeah, they came to me with this solution. I may not call it the same thing as the customer down the street, but we all know what we're talking about here. You just have to be able to explain that all to a judge.

MR. MOISEYEV: So let me talk about a slightly different situation. That's not a firm that is -- sort of has the idea of entering a market, but a

firm that's actually entered the market, so it's sort of day one of their entry. Small share, they're just getting started. Is that analytical framework different?

Andrea, do you want to weigh in on that?

MS. MURINO: Yes. You know, I think -- this is a boring answer, but I don't really think the analytical framework is any different for all the reasons that we've heard on this panel and also on some of the earlier ones. To me, I don't know if Professor Yun is still here, but this is about the evidence. Marcia, Marcia, Marcia, evidence, evidence, evidence. And so I think that maybe the caliber, maybe the quantity, maybe the quality will vary slightly, but I don't think that you need to have -- there needs to be a difference in the analytical approach. I do think it's pretty well settled that the way that the FTC and the DOJ go about analyzing these deals in terms of that framework is appropriate.

But I think that understanding what the facts mean is where maybe it gets a little bit more challenging. And going back to one of the earlier questions, you know, is this something where you want a technologist, I wasn't -- you know, I think generally I'm in favor of the FTC and DOJ having access to

experts in their own houses, people who will sit there and educate them, whether a deal is pending or not, about trends.

So, if I'm going to central casting and I'm imagining, well, what's the kind of person you want to be giving the FTC input there, there's this Wall Street Journal article a couple of months ago about the new uniform in tech with the khakis and the fleece vest. That's the kind of person I'm imagining that the FTC would have to call upon.

Now, whether it's done informally and you just pick up the phone and call them or whether they actually have an office somewhere in the Constitution Center, I think that's the kind of thing where for particularly -- for a potential competitor case, someone who knows what the trends are, who can spot them for the FTC, could be very valuable. But don't think the framework needs to be any different.

MR. MOISEYEV: Well, Rich, go back in time to when you were sitting at Pennsylvania Avenue, putting together cases for the Government.

MR. PARKER: I'm trying to remember back that far.

MR. MOISEYEV: Yeah, it was -- we're trying to remember that as well.

MR. PARKER: Yeah, good.

MR. MOISEYEV: But what kind of evidence would you want to see and want to be able to marshal in bringing a case against a transaction involving either a newly minted competitor or a firm that's in, that's about to enter the market?

MR. PARKER: Well, I would start with the statute, and I would note that it says likely and substantial. And then I would look at the nascentness -- is that a word? -- of the entrant, and I would say likely is a problem and potential and substantial is a problem. And so here is the kind of evidence I would look to to make those points. And this is really -- I mean, these are hard cases. There's just no question about that. But this is what I at least came up with.

And I'd just start with the obvious one, is the big guy paying a gazillion dollars for this? And if that's the case, that indicates likely and substantial, and I'd sure look at the documents underlying the gazillion-dollar price. That's pretty obvious.

The second thing is the old-fashioned way of winning an antitrust case is on the documents. So you got to look at what the people are saying internally about how likely this company is to take off and how

substantial an effect it will have on them. And I'd look at the documents seriously from both sides.

I'd look at patents. I'd say, well, you know, the A side has a bunch of patents, and the B side has bunch of patents. You add those up, what's that make the future of this market look like? I would -- and certainly -- I think we've talked about it here -- there's got to be uniqueness. Is there something distinctive about the B side here? There isn't anybody else out there doing it, and I mean, there's 12 guys who've come up with this company, you know, in Palo Alto, or there's 12 guys in Los Altos who are doing the same thing.

I would most certainly -- I would most certainly want to know that. I'd look at the equipment. I mean, if you -- if these two merge, will they have some sort of monopsony power in hiring the type of technocrats and technical people and scientists to do this? Will they have some kind of a dominant position or some monopsony position in the fancy equipment you have to do this.

And, then finally, I would go to -- I would get some expert testimony as to somebody who -- you know, I might even look at an investment banker or somebody, be one of the things I'd look at and say,

look, the people -- you know, what do you think? I mean, would you -- does this look like a good investment going forward? I'm not sure you'd call somebody like that because they can always be cross-examined, and they have opinions on everything, but, nonetheless, they might be able to give you some information. And then the type of technologist who really understands these markets.

But that's what I'm getting back to is that if I was in that position I would want somebody -- and it's not me, I can barely operate my phone -- but I would -- somebody who knows the Silicon Valley and who knows -- you know, can look at this stuff and say, you know, these guys really have something going here and that's why they're paying a gazillion dollars. I would want to have that kind of information as well.

And that's why I thought maybe getting some generalized Silicon Valley technology help might be helpful here. But the key is substantial and the key is likely, and that's the laundry list I can think of, but maybe others have other bright ideas.

MR. GELFAND: Well, I was going to just disagree respectfully with one point, Rich.

MR. PARKER: But you disagree with me on every panel.

(Laughter.)

MR. PARKER: But go ahead, that's all right.

MR. GELFAND: That one's predictable.

MR. PARKER: No, but -- no, but I'm over that. I'm over that last panel, Dave. I don't even think about that last one, but go ahead.

MR. GELFAND: This point was made earlier as well. I think there is very little evidentiary value in the size of the price, the amount of the price of a transaction. Sure, go look at the documents, see if you can find evidence that the whole reason for the transaction is to eliminate competition, that's fine, but you're going to do that whatever the price is.

There are a whole lot of reasons why companies pay a lot of money for another company. It might be that they're just very valuable, inherently valuable. They might have great people. Companies sometimes pay a lot for people. They might have a product that's going to save the acquirer a year's worth of development costs on their own that itself could have value to it.

And I think that the times when I have been most frustrated with an enforcer telling me why they're suspicious about a transaction is when they were sort of superficially saying, well, this is such a high

price, we can't imagine why they would be doing this if it wasn't anticompetitive. There's all kinds of ways that you can imagine they would be doing that. Go get the evidence. If you've got evidence that it's anticompetitive, that's fine; otherwise, the price has absolutely no evidentiary value whatsoever.

MR. PARKER: All right, so you're defending the case, and the judge says, Mr. Gelfand, you've been telling me what a peanut, what a baby this company is for the last two days, why are you paying -- your client paying a gazillion dollars for this zero company?

MR. GELFAND: Well, I'm probably not going to say it's a zero company if they paid a billion dollars for it. I'm going to say it's a great company. It's just not eliminating any competition.

MR. PARKER: All right, well, that sounds like substantial and likely to me. I mean, look, so I'm not thinking of the -- I'm thinking somebody in black robes is going to wonder why you're paying a gazillion dollars for this company that's got no likely effect on anything. That's what I'm saying.

MS. FEINSTEIN: And if I could interject because I'm in the middle of these two. Let me try to bridge the gap here, but I don't think I'll be

successful.

MR. GELFAND: I predict I'm going to agree with Debbie on this one.

MR. PARKER: I said, Mike, I cannot sit next to Dave.

MS. FEINSTEIN: The acquirer could be uniquely able to get efficiencies out of combining the two companies that nobody else could. And a great example of that, I think, and I confess I worked on the case, and Mike will no doubt have a different view, is Genzyme-Novazyme. Genzyme-Novazyme was a consummated deal. I really wonder whether that would have been challenged if it wasn't consummated because you wouldn't have known. But because it was consummated, we were able to show the efficiencies and the unique combination of companies that by working together could create a drug that companies had been working on for 50 years.

So great, and I can't believe I'm saying this, but President Trump brought the daughter of the CEO of the acquired firm to the State of the Union to talk about the fact that she was in college. We thought she was going to die during the case.

There was nobody else who could have seen the value in that or could have developed it because they

didn't have the same technology and they were coming at it. So to them -- and I don't think they paid a particularly high price, that's why it wasn't reportable, but they could get value out of it that nobody else could. And it was worth it to them, and those kinds of efficiencies are meaningful.

I just want to make the contrary point, which is people are talking about all the ones that the Government misses, but there's a lot that the Government guessed on and got wrong, and that's just going to happen. And my favorite example is gene therapy where the press release talked about how it was going to be saving lives to block this merger and have these two different companies trying to innovate on gene therapy.

I've always wondered, if you brought them together and maybe other companies together, maybe there would have been better innovation on gene therapy because you'd had a lot of really smart people in the room together. It's very hard to predict this stuff, but I think there be can be real efficiencies, and that's why somebody might want to pay for a company that to the rest of the world looks not as valuable.

MR. MOISEYEV: Much as I would love to turn this into a pharma panel where I'd feel at least on

somewhat safer ground, I will -- and also jump in with my own views, I'm suffering the pain of the moderator here, but I want to jump to monopolization, only because there was a whole panel on Microsoft.

It's been discussed, I think either implicitly or explicitly on all of the panels that somehow there is an opportunity for the agency to circumvent some of the restrictions in the Section 7 case law by looking at the Section 2 case law, or in the Sherman Act. And the Sherman Act, as people have probably pointed out, the risk of competition is something that needs to be preserved. The Microsoft case talks about preserving the nascent competitor, and what better way to eliminate them than to acquire them. You know, I think the lessons of Actavis potentially are exportable there as well.

And so with that very loaded question, Rich, can you give me a sense of can I bring a merger case under Section 2 and avoid a lot of the problems that you've been cataloging here?

MR. PARKER: You know, it's very -- very interesting. You look at Netscape at the time that the bad conduct -- and I'm going on the District Court in D.C. Circuit opinion. They actually had a big percentage of the number of devices out there, they

were a real company. They were a startup. They'd only been around less than two years, but, you know, they did have a decent size, and they did look like they were on a good trajectory. You might have been able to show substantial substantiality.

But it's interesting, you get into the Section 2 case and the word “substantial” is not there. You have to show a competitive effect, and it seems to me that the courts are saying, if you're excluding somebody who really is a peanut, that's still excluding somebody, and you can't do that. And by the way, if you're a trial lawyer, okay, can you imagine defending a Section 2 case and say, you know, we may have excluded Paul Denis' company, but he is so small it doesn't make any difference. And then they'd say, Mr. Parker, so you're saying that it's open season on small companies? Well, I mean, that's not an effective way to defend a Section 2 case at all. And so there is an absence of substantiality there that I think is very important in the Clayton Act context.

You mentioned Actavis, and I think that -- I mean, and I don't want to get Debbie all riled up on me, but Actavis is -- she and I have gone around on this one before. And Actavis, I think you need some -- another trip to the Supreme Court to find out what

that means. But there still is the concept that you've got this generic company out there and that what you want to preserve is the possibility that they may jump in with an at-risk launch or something like that, and that somehow has a restraining power on the brand. And so that is a concept.

But the difference is, is that sometimes the generic company is Teva, which is probably bigger than the brand, and they do have a product, and they have everything ready to go. So I'm not sure if that is any kind of a precedent here or not, except for the general proposition that the potentiality of somebody jumping in is a competitive dynamic that's worth preserving.

MR. MOISEYEV: Well, let me -- I mean, the thing that is confusing is in almost any other kind of merger case it's generally believed that the Clayton Act is more permissive than the Sherman Act. And it sounds like at least in this area, we're hearing something different.

Debbie or Rich.

MR. PARKER: Yeah, I was going to say it's the substantiality requirement. Like I said, you can't defend a Section 2 case by saying the guy was really little so we can do anything we want to him. And in the Clayton Act, you hang your hat that, you know,

buying Paul Denis' company doesn't make any difference because he doesn't make any difference. With all due respect to Paul, but that's what I'm saying. You can make that argument under 7; you really can't under 2, unless I'm missing something.

MR. MOISEYEV: That's it?

MS. FEINSTEIN: Look, you were going to tee up a question to me, and it's in the script, so, look, I think we could debate all day long about Section 2 and Section 7, and we could debate all day long about how -- whether Microsoft and Rambus are consistent or not consistent, and way smarter people than I will have views on this. The important point to think about for merger enforcement is, is the fact that there is some uncertainty about precisely what the law is on potential competition or precisely what the law is about a monopolist buying a nascent competition, is that scaring off the FTC from bringing cases?

I can't speak to the DOJ; I'll let Dave do that if he has a view. I don't think it is. And Mallinckrodt is the best example of a case where not only were we not scared off, we were so sure of our case or at least willing enough to take on the case that we got a very big disgorgement figure. So at some point the law may be a deterrent to bringing these

kinds of cases but not at the moment. Staff is not out there saying, ooh, we're not sure how we're going to write the footnote about Rambus, so we better not bring this case.

They're going, is there a problem? Yes. Let's figure out how to write a really good complaint and tell a story to a judge and, you know, we'll fight about the law if we have to. So far that hasn't happened; down the road it might. And it might be that we're all talking here ten years from now as on a panel that we had earlier, you know, folks were all saying, oh, you know, AmEx got it wrong and the world is going to come to an end because of that decision, and maybe there will be a similar decision on potential competition that we'll all be concerned about, but that's not a deterrent right now to bringing the kinds of cases that I think folks think should be brought.

MR. MOISEYEV: We don't have a lot of time left, and I really -- there are a couple of very good questions on areas that I wanted to touch on here. So I want to first ask a question about retrospectives that I think there was a rather lively conversation on the last panel about retrospectives and whether sort of given the uncertainties that you have in these cases about how things are going to evolve, would a good

strategy be to wait and see? And if they turn into Instagram that all the kids love, then bring the case. And if they turn into the Friendster or whatever -- I'm hopelessly out of my depth now after two websites, but -- and then that's a great filter, right, the real world, the real world experience?

Scott, can you give me thoughts on that?

MR. SHER: Yeah. So I think that would be dangerous. I think that would be dangerous for a number of reasons. I think, look, retrospective studies are interesting and sometimes they're important, but if you were to conclude, for example, well, Instagram has become popular so now let's bring the case, you have to ask yourself what's the reason that Instagram has become so good. Has Instagram become so good because inherently it was a really good product at the time it was acquired by Facebook and was actually going to become a large competitor? Or did it become a large competitor because Facebook made it a large competitor or a large presence in the market? And market events, you know, superseded what happened as result of the transaction and you can't really attribute the deal to the reason for Instagram success.

So you can say today, oh, YouTube is huge. And maybe we should bring a case to block the

Google-YouTube deal. But that doesn't answer the question as to why YouTube is great today. Is YouTube great today because it was going to be great absent the acquisition by Google? I don't know if people remember this, but back in 2005, that website was actually still funded by credit card debt by two people who were running it out of their garage. I mean, was that company likely to become really large as a result of -- you know, if it wasn't acquired by Google, or did it become large because it had access to the resources of a Google to make it large.

So I think going back and doing that sort of retrospective is very problematic. You can draw very erroneous conclusions as a result of it. I'm not suggesting that retrospectives are bad, but I think in technology markets where things change very rapidly, where there are a lot of reasons why something might become successful or might fail, you have to be really careful to attribute the deal to the reason of the success of the competitor that was acquired. You can't just say, well, the company became big, therefore, we should probably have challenged the deal in the first place. I think you would get a tremendous number of false positives.

MR. MOISEYEV: Well, let me -- I mean, I

think Professor Yun said that -- I hate to be quoting him, God knows, probably some false premise with my question. But, you know, he said everybody's for retrospectives. Is everybody here sort of for retrospectives, the way Scott apparently is?

MR. SHER: Just one more quick thing. I'm not in favor of retrospectives from the -- perspective per se. What I actually think, and I had mentioned this earlier, what I think the agency should do, because there seems to be a lot of confusion by a lot of people who are actually not practicing, well, do the agencies just not understand how to do these deals? Well, they actually do understand how to do these deals.

So how do you rectify the problem that no one knows that the agencies understand how to do the deals, but they're actually doing them correctly? They should issue more closing statements. The agency should explain to the public, what did you look at, why did you look at it, why did you reach the conclusion you reached, what other conclusion could you have reached.

Some of the best decisions that have come out of the FTC in my opinion over the course of the last 15 years are Genzyme-Novazyme, where there was an extraordinarily detailed closing statement, and the

cruise line case. And those are cases where the FTC actively took steps to explain to the rest of the market why they took the actions they did. Those are the sorts of things that I think would help increase knowledge as opposed to just going back and saying, well, something is successful, now we should go back and retrospectively challenge it.

MR. MOISEYEV: Anybody else have something on retrospectives? If Rich wouldn't use our closing statements against us when we sue him, it would probably be much more -- the agency would be more prolific in that regard.

MS. MURINO: I'll just add, I agree closing statements are really valuable and would encourage the Commission to do those very often, maybe even on the level of the way some of the Europeans do it at the E.C. level, some of the member states do it. I think it's a great idea. I also think that internal retrospectives, and I worked for Bill Kovacic, who obviously spent a lot of time thinking about the FTC as an institution, and I think there's value to the FTC doing retrospective studies, even if you don't release it to us. Obviously, I'd prefer you would release it to us. But I think that there's real value to being able to have the staff go back and look at what they

did and see what they missed, see what they did well.

I think sometimes you can learn an awful lot from that to give you confidence to go ahead. And so I would encourage, even if you're never going to tell me what you find, for you all to go back and think about ways that you did well on this deal and here is where you fell a little bit short.

And certainly having the 5(b) authority to be able to get data from parties once those -- once transactions have closed, I know there's paperwork involved, that you have to go to OMB, it's very complicated, and I won't pretend to understand it, but having that ability, I think, means you'd be able to really do something meaningful, even if you never tell me about it.

MR. GELFAND: Yeah, I agree with that, but I have to say, like any scientific work, a study needs to be unbiased. And when you've got the people who were making the decisions studying the outcome of the decisions, that is not unbiased study. So I think it's great. I think if the agencies want to do it, that's great. I think they've got a lot on their plates, and it's hard to go back and look at old stuff when you got a bunch of new stuff coming in.

MR. SHER: Particularly when David is telling

you to go really fast.

MR. GELFAND: Yeah, you got to go really fast. You got to go really fast, Paul. I hope you got that down.

But, you know, other people need to do it, and we've heard some examples on the panels today, and even though I don't agree with everything people have been saying, I definitely agree with the scholarship of it all. Study this. Convince other people. Don't just say your opinions, do the work, make it verifiable, replicatable, all the things that scientific work is, be unbiased, and eventually this body of work will lead to conclusions.

MS. FEINSTEIN: Just one quick sentence. I think the Commission does that all the time. They don't call it a study. They look at the industry again in the next deal, and as part of that, they are looking at whether or not the predictions of the last deal are right.

And I think of one in particular, Mike and I worked on it, where there was controversy over the first deal. And when we went back to ask folks, customers, how did it turn out. They, to a one, said, oh, this was a great deal. This was a deal that had been controversial as to whether or not it should be

cleared, and the customers all said, yeah, all the efficiencies, we got it, we got lower prices, we can show you, it's in our documents. So, I mean, they're doing that sort of thing, you know, as they're going along.

MR. MOISEYEV: I'm sorry, I'm not a panelist here, so I won't -- maybe I should say it in the form of a question, Jeopardy-style here, but I think Dave's point, maybe if you can expand on that, is how do you solve for the problem of the investigators or the confirmation bias that's inherent in those kind of analyses.

MS. GELFAND: Yeah, no, I think that's a big problem when people look at their own work and they go back and that's what they're trying to show. You know, it's necessarily going to be untransparent to the public if the agencies are relying on confidential data, they can't publish that data. I don't know what the answer is to that. I think there is value to it. I'm not saying people shouldn't do it to the extent they have time and resources to do it.

But I do think, you know, people would be skeptical of the results of, you know, work being done by an organization studying its own success rate.

MS. FEINSTEIN: I don't know. People quote

the divestiture study back a lot. I mean, look, yes, on the margin, but, you know, if that was just the agency trying to show that it had done great, I think it would have come up with a higher percentage of such numbers.

MR. MOISEYEV: We tried to add more input into that.

MR. GELFAND: That's actually one of the things I had in mind as I'm thinking about that.

MR. MOISEYEV: All right. To avoid too much thread drift here, I wanted to ask -- there was one question that came in, more on this technologist which I think just is something that spurs so much interest. One of the questions was, if we had a budget, which is almost hypothetical, not even worth contemplating, but it was large enough to add ten people to the agency, do you put them or any portion of those in to people with this kind of expertise, given sort of what's happened over the last three days here, what we've heard over the last three days? Is it more attorneys?

You know, I probably could answer the question about more economists, more commissioners. There are a lot of possibilities that you can put the resources that I might have my own views on. But, I mean, seriously, I think it is a good question because

it asks, you know, what is the need from the outside perspective at the agency.

MS. FEINSTEIN: I got asked that question by the Chairwoman, if I could have $5 million, what would I do with it. I mean, it was a serious question because it was a time when we thought we might get some special bonus. And I said, surprisingly, I'm sure, to the lawyers in the room, sorry, no offense, I said more economists. And the reasons is, A, we don't have enough of them on the cases; and, B, I would love a group of economists who could use the data and do studies and, you know, maybe hire outside economists to do the studies as well, that more studies was the one thing I would want to spend money on.

MR. MOISEYEV: Anybody else have thoughts on that?

MR. SHER: I agree with -- particularly if you're talking about technology deals. The one thing -- you know, and Debbie and I worked on a deal where there was -- when she was at the Commission. There was sort of a tremendous amount of data. That is one thing that is different about technology deals and about other transactions. There's a tremendous amount of data sometimes. And it's very difficult for the FTC to get up to speed on how to analyze the data really

quickly.

It would both facilitate, you know, Dave's desire to get transactions closed more quickly where they deserved to be closed and probably would help the FTC make better decisions on whether or not there's a likelihood of effects if there were people who can actually do the type of data analytics that you need to do really rapidly.

MR. GELFAND: I would clone Ted Hassi and hire ten of him. And I would do it so that you have -- yeah, I know, he's up there. I always pick somebody in the audience, you know, when I pick on somebody. I would do it because you always need more capable trial lawyers, I think, in any organization whose mission is law enforcement and bringing cases.

And I would do it not just so you're even more effective in court, because you're already very effective in court, the Government's winning most of its cases in recent years, but also because you need experienced people to make judgments about when it's time to cut it off and this is not a case we can bring, it's not winnable, there's really no problem here. So that's what I would do. I would hire ten of that guy.

AUDIENCE MEMBER: Still got that $5 million.

(Laughter.)

MR. MOISEYEV: Or that's half an economist based on the bills we're getting for experts.

(Laughter.)

MR. PARKER: I just want to say I totally agree with Dave.

MR. MOISEYEV: I'm dumbfounded now.

MR. GELFAND: Maybe nine Ted Hassis and one --

(Laughter.)

MR. MOISEYEV: I feel like we've finally reached consensus on our panel. We have a couple of minutes to go, I was just wondering if anybody had anything that they wanted to add before we close out here.

MR. GELFAND: I'd like to add a comment to the law students in the audience because I think there might be some of you. This is a fabulous area of law to practice in. There is so much going on, and I hope you've seen through the interactions that have taken place today how great a bar this is and how the people really think hard about these issues, how they have very civil discourse about it, and organizing things like this, Bilal, where people can come together and debate these issues, try to inform the agency about the different perspectives, bringing scholars together with

practitioners, with enforcers, I hope law students in the audience appreciate how wonderful an area of practice this is. So that will be my closing remark.

MR. MOISEYEV: Well, maybe that's a good place to end. I will say that I feel very privileged to have had the chance -- I disagree with all of you regularly on substance but have learned a lot from you, and I appreciate the opportunity to have been able to moderate this panel.

(Applause.)

(End of Panel 5.)

CLOSING REMARKS BY DOUGLAS H. GINSBURG

MR. MOORE: After a long but informative three days of hearings, we have one final event that I hope everybody could sit for and focus for just the last ten minutes. We have quite a treat. Judge Douglas Ginsburg is going to be giving closing remarks.

As many of you know, Judge Ginsburg is a Senior Judge now on the U.S. Court of Appeals for the D.C. Circuit, which he was the Chief Judge from 2001 to 2008. He's also a professor here at the Antonin Scalia Law School here at George Mason University. And in the 1980s he was the Assistant Attorney General, Head of the Antitrust Division. It may not make the first paragraph of his bio, but one of his finer moments was serving as my boss as a law clerk from 2008 to 2009 on the D.C. Circuit. So it's a pleasure for me to introduce Judge Ginsburg to close us out.

(Applause.)

JUDGE GINSBURG: Thank you, Derek.

Well, you've had a long day, and it's been a long several days, so I'm not going to detain you for very long. But I did want to provide a little perspective from the realm of the gray-headed, the gray hairs.

These hearings, as I think you may know a

little bit about, are essentially modeled after hearings that were convened by Robert Pitofsky, then chairman of the FTC in 1995. And in those hearings, the Commission considered questions, some of which are familiar to us today, such as -- well, the broad general one is -- was then and is now -- how antitrust law should be adapted in light of -- and whether it should be adapted in light of developments, innovation and increasing -- at that time increasing globalization.

So my brief remarks today are going to focus on the broad aspirations of this kind of review that's taken place periodically. From the 1995 hearings, to the report and recommendations of the Antitrust Modernization Commission in 2007, to the hearings that have been conducted these last few weeks, the authorities, the Commission in particular, had to confront whether and how existing tools should be adjusted to meet new market realities.

It's hard to get into the subject without first pausing for a moment to honor the work of Bob Pitofsky, who as many of you know, passed away just last week. Bob was a commissioner of the FTC starting in 1978 for three years, and then again in 1995 came back as chairman until 2001, a pivotal time that shaped

the Commission and brought the agency to new prominence.

Bob had too many accomplishments to be recounted fully here, but more important than any of those in particular was his approach to antitrust enforcement, which was sharp and thoughtful and crucial to the Commission's ability to confront new challenges that it faced at the dawn of the 21st Century.

Throughout his chairmanship, Bob demonstrated that a measured approach to competition policy could reap great rewards for consumers. He vastly improved the Commission's administrative processes in several way, one important example being creating the fast track for administrative litigation that significantly improved the Commission's ability to resolve antitrust cases in a timely fashion.

After leaving in 2001, Bob went back to Georgetown University Law School and continued to teach and write about antitrust -- teach antitrust and write about it until the very end of his career. And today, it's thanks to many of his accomplishments at the FTC, and in no small part to the precedent that he set with the hearings in 1995, that the Commission has been able to bring together really top people in academia and government, in law and in economics as well as

stakeholders and members of the public, to consider the challenging issues that you all have been dealing with.

The 1995 hearings were officially called The Global and Innovation-based Competition Hearings, and they were held over a period of two months. That may seem even more ambitious than the rather tight schedule that Bilal has set out for all of us over the next several months.

Tim Muris noted some time ago -- Tim, himself, a former chairman of the FTC and a longstanding member of the Antonin Scalia Law faculty here, a while ago noted that through those hearings, the chairman took advantage of the unique features of the FTC, bringing together as it does in one agency not just the commissioners chosen on a bipartisan basis but the administrative law judges, attorneys, the now 80 -- at that point, I think 60 -- Ph.D. economists on the staff, making the agency one of the most important industrial organization economics departments in the world, bringing all of that together with its power to initiate studies to 6(b) authority, to initiate studies and report to the public and to the Congress on matters of competition and concern.

The subjects taken up in 1995 ranged pretty broadly in substance as they do this time around. Just

to give you a sense of how times have changed and to some degree have not changed, consider these selected topic headings from the agenda.

How should antitrust define current generation markets when firms compete on innovation (or product attributes), as much as price?

Or what roles do antitrust and intellectual property protection play in promoting innovation and competition? You could have reused these, Bilal.

Finally, how do computer companies compete, how do the network and interoperability aspects of the industry affect competition?

Throughout those hearings, the Commission heard advice from economists, from legal scholars, from informed members of the public. And then the staff of the Commission distilled those contributions into several projects, some of which had lasting application, not just influence, but application today. For example, after the hearings, the FTC, together with the Department of Justice, revised the guidelines on efficiencies in merger review and made more precise and more demanding the showings that had to be made to prove that claimed efficiencies were, indeed, merger-specific.

Now, the FTC staff also embarked on a project

with the antitrust division, the joint venture project in order to clarify the agency's policies regarding collaborations among competitors and resulting in the guidelines that were issued in 2000.

Not long after, the Congress, in 2002, wanted to know for itself whether the antitrust laws needed to be updated in some way and created the Antitrust Modernization Commission through an act of that title in 2002, creating and tasking a new and temporary group to investigate what should and should not be changed in light particularly of globalization and of rapid technological change, another familiar theme today.

And that was a bipartisan, 12-member commission that invited the public to recommend topics for its investigation. The AMC issued its report and recommendations in 2007. And as with the 1995 hearings and those now underway, the AMC's report covered the whole range of topics from criminal remedies to intellectual property, to whether the Congress should repeal the Robinson-Patman Act.

And the report concluded that although there were ways in which antitrust enforcement could be improved, the current antitrust laws were “sound” and did not require entirely new or different rules to address the then so-called new economy, in which, and

I'm quoting the report, “innovation, intellectual property, and technological change are central features.” Pretty contemporary account, frankly.

Of particular relevance today, the AMC concluded that because antitrust law is flexible and open to new economic thinking, the agencies and the courts have the tools that they need in order properly to assess new marketplace developments and competition issues as they arise.

Now, the current set of hearings, we've heard and we're going to hear, continue to hear from a wide range of experts and stakeholders about how the economy has changed since 1995 and, indeed, even since 2007. And it's true that even a decade ago the agencies likely could not have foreseen some of the competition issues now associated with big data, with privacy, with algorithms and so on.

And, indeed, the first case involving a platform business to reach the Supreme Court was decided only a few months ago. So this is all fairly new stuff. With these new market realities, some observers are now calling for really significant changes in the focus of antitrust law. And I'm going to highlight just a couple of them that have emerged in recent years, and we've all heard, read, and perhaps

said something about one or both of them.

And the first is challenges to the consumer welfare standard. The 1995 hearings did not call into doubt the so-called core aspects of antitrust enforcement regimes, which were said to have ”served the country well.” Rather, they addressed adjustments that the agency had to make, thought they should make, in order to ensure vigorous competition and consumer choice.

Now, as Chairman Simons noted when he gave his opening remarks a couple of weeks ago, now the hearing calls to expand beyond consumer welfare standard and to consider all manner of other concerns ranging from economic inequality all the way back -- and I take the word "back" advisedly -- to a concern with the sheer size of firms, a consideration that was explicitly repudiated in 1981, that was unmourned in 1995 and 2007, but here in 2018 is the subject of a forthcoming book by Tom Wu, next month, called The Curse of Bigness.

Second is the role of intellectual property. As new products are devised to take advantage of digital technology, the importance of IP rights has increased throughout the economy, but the potential for anticompetitive abuse of intellectual property has also

become an increasingly important antitrust concern. And there's certain to be a continued debate throughout the present hearings about whether the historical protection that we've afforded to intellectual property should be compromised in order to balance incentives to innovate with market access for competitors.

Whether U.S. firms continue to dominate technology markets worldwide is surely at stake in the resolution of that question. Now, I'm not going to belabor you at this late hour with my views on these matters. They have been submitted to the Commission in the remarks submitted by the Global Antitrust Institute, to which I'm signatory, but they are important issues on which a lot of perspectives are going to be brought to bear.

In closing, I just want to leave you with some conclusions I'm recycling from the report in 1995, and I think they're still relevant. This is the staff's conclusion. Effective antitrust enforcement requires rules and processes that facilitate accurate judgment in the face of inherent uncertainty. Developing those new rules depends on a cautious approach, reliance on specific facts, a willingness to learn from the past, transparent decision-making, and the articulation of competition

values whenever antitrust policy is being made.

I don't think we can do better than that. I hope we can do that well this time around. Thank you for your attention.

(Applause.)

(Hearing concluded.)

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s/Linda Metcalf
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Court Reporter