Role of Market Power in the Digital Economy

MR. POWELL: Everyone, welcome back. We are now going to begin our next panel, which is "The Role of Market Power in the Digital Economy." I am going to hand it over to our co-moderators, Eric Hochstadt from Weil Gotshal and Kellie Lerner from Robins Kaplan.

MR. HOCHSTADT: Great. Thank you, Wes. Thanks, everyone, for being here. We are going to be talking about the role of market power in the digital economy for the next 75 minutes. I think it probably goes without saying that you see every day or every week an article about today's leading firms and how they are impacting competition across virtually every sector of the economy. Just last week the Wall Street Journal published a very lengthy article entitled The Antitrust Case Against Facebook, Google and Amazon, and the subheadline was a few technology giants dominate the world, just as Standard Oil and AT&T once did; should they be broken up? We won't dare to answer those questions during this panel, for lots of reasons. But the question is often posed, sometimes as the sky is falling or other apocalyptic terms. Does the Sherman Act from 1890, or its more recent brethren, the Clayton Act from 1914, have any relevance today? And we're not going to answer that question today either in the next 75 minutes.

What we will try to do with two accomplished economists, Rosa Abrantes-Metz and Pat DeGraba, is explore some of the economic thinking when it comes to analyzing firms in the digital economy. For example, are the economic principles the same or are they different? Do barriers to entry exist at all with the rapid pace of innovation? Or is it the flip, that there are super barriers to entry created by data ownership? How do we think about market power when firms are platforms or networks, when some of those firms do not even charge consumers to use their service? Think of Facebook, Gmail, LinkedIn. Since economic theory has driven much of the development of antitrust law over the last 50 to 60 years, we will bring the discussion home to how economic thinking about market power in the digital economy is impacting the practical day-to-day practice that we all are dealing with. We are lucky to have Nick Gaglio here to help us navigate why this matters with actual cases and investigations.

When it comes to mergers, how are the agencies and courts looking at digital players? Are they a game changer in the analysis, or is it just another argument in the toolkit and it depends on the facts? Then when you think about unilateral or single firm conduct, are barriers to entry too low and the pace of innovation too vast for a digital player to have market power that may be used to engage in exclusionary conduct? Or, do you judge every case on its merits, and there are some situations, like the *Microsoft* case, which we will talk about, where there was an issue? This is still a very ambitious agenda for 75 minutes. We hope you will find the discussion engaging. I am

going to turn it over to Kellie to do the introductions for our panel.

MS. LERNER: Good afternoon, everybody. It is my pleasure to introduce our esteemed panel. To my left is Nick Gaglio, who has over 15 years of experience litigating antitrust claims at Axinn. He's assisted clients obtaining antitrust clearance for large and complex strategic mergers, and does so frequently as global coordinating counsel. He was recently named to a Who's Who Legal Competition Future Leader; and hot off the presses, he was just elected Vice-Chair here of the Antitrust Section of the New York State Bar Association. So congrats to him for that

To Nick's left is Romy Abrantes-Metz, who is a managing director in the Global Economic Group and adjunct professor at the Leonard Stern School of Business at NYU. She also previously taught at the University of Chicago, and is a former staff economist at the Federal Trade Commission. A significant part of her work are matters involving collusion and manipulation in various industries, including commodities and markets. Her empirical screens have assisted in flagging illegal conduct in a variety of very high-profile cases, including Libor, Euribor, gold, silver, and other metals. She is experienced in matters involving unilateral conduct, namely mergers in U.S., Europe, Central and South America. And she co-authored reports on payment systems in Europe. If you don't get enough of listening to Romy today, I invite you all to come to the next Women in Antitrust panel on February 15, where she will be discussing economic screens.

To Romy's left is Pat DeGraba, who is a senior staff economist in the Bureau of Economics at the Federal Trade Commission. His recent research includes papers on exclusive dealing, multiproduct pricing and interconnecting regimes for telecommunications networks. He has served as the deputy chief economist of the Federal Communications Commission, as well as chief economist in that agency's Common Carrier and Wireless Bureaus. He has been a principal at Charles River Associates and an assistant professor at Cornell's Johnson Graduate School of Management.

Today, I'll be reprising my role as co-moderator with my colleague, Eric Hochstadt, who is a partner in Weil's Litigation Department. His practice focuses on civil antitrust, class action, and other complex and sports-related litigation, as well as criminal cartel investigations and antitrust counseling. He has litigated numerous dispositive and strategic motions, appeals, and has facilitated a number of favorable settlements on behalf of litigation teams representing clients, including CBS, eBay, Houghton Mifflin, GE, MasterCard and StubHub, among others. He's received a number of distinctions, including being listed as a "Leading" Lawyer for Antitrust in New York

for Chambers USA, by Legal500 as a "Recommended" lawyer for antitrust nationwide, as well as Benchmark Litigation Rising Star.

I am Kellie Lerner, a partner in the New York office of Robins Kaplan, Antitrust and Trade Regulation Group.

So I wanted to kick it off with Nick, and ask you: Where does market power fit in our antitrust analysis from a legal perspective?

MR. GAGLIO: Sure. A why do we care question. As everyone who practices antitrust knows, the reason we still care and, as I think we will perhaps explore later in the panel, will continue to care about this is it is and will remain a critical screening for both enforcement agencies and courts to determine whether an antitrust violation may have occurred. It is a necessary but not sufficient condition. So obviously, with respect to mergers under Section 7, no substantial lessening of competition without the attainment or advancement of market power. In fact, the Merger Guidelines themselves say that a unifying theme is that of market power, and it is obviously central to our merger analysis. And with respect to Section 2, monopoly power, which is a substantial and even more durable market power, we will get into that definition at length in a moment. Is it obviously a necessary element of even exploring whether there can be a Section 2 violation at all?

Obviously, we are focusing today on unilateral effects, but even in terms of coordinated activity, market power is necessary in the Section 1 context, not only in the Rule of Reason situation, but of course, for cases that don't fit neatly within the classic per se framework. It is frequently part of the conversation to determine whether or not to apply per se or Rule of Reason treatment. So put another way, you certainly care about market power, because you can't have a violation if you don't have it. But, just because you do have it doesn't mean you do have a violation. We will get into this a little bit. But I do just want to note at the outset that from a legal perspective one of the things that we struggle with is the ambiguity that is created when courts, economists, commentators and others talk about market power, talk about monopoly power. And we will get a little bit into the difference between those two. It can be challenging when courts are using these terms sometimes interchangeably, sometimes in a vague context. So, when you are talking about evidence that will show market power, I think the first thing you often have to do is get down the first principle, and think definitionally what you are trying to do.

MS. LERNER: Thank you. How about from an economic perspective, let's hear from Romy on market power analysis.

MS. ABRANTES-METZ: Even though the law defines them differently, economists see them very similarly. They are essentially the same. It is the ability of one firm

or more to raise their prices above a competitive level in a profitable manner. So economists do tend to treat them equally.

MS. LERNER: How about market power versus monopoly power, do you see any distinction between the two concepts?

MR. DeGRABA: Let me start with the standard FTC disclaimer that nothing I say represents the opinion of the commission or any commissioner. I've been an economist for a long time, and economists don't see a difference between market power and monopoly power. As Romy said, it is the ability to raise price above the competitive level. I've heard some people come into the agencies and use both terms but I never really understood what the distinction was supposed to be. I Googled the difference between monopoly power and market power, and the third result that came up on Google—which we will talk about later probably—is a paper by Krattenmaker, Lande, and Salop, sitting on the DOJ's Antitrust Division website, and it is entitled "Market Power and Monopoly Power in Antitrust Law." And in the introduction, it says there is no difference between the two terms. They go on to talk about the difference between the ability to restrict one's own output and to restrict a competitor's output. So I don't know what distinction people try to make between the terms, but from an economist's point of view, they both refer to just the ability to raise price above cost.

MS. LERNER: Great. Pat, staying with you, why is market power relevant from your perspective?

MR. DeGRABA: There is a slight difference in focus between the analysis of market power in a merger investigation and in a unilateral conduct investigation. In a merger, the focus is on the *change* in the level of market power resulting from the merger. The agencies will typically take the level of market power of the premerger market as the starting point. The market in principle doesn't have to exhibit market power pre-merger. However, as a practical matter it is often the case that the pre-merger market has some degree of concentration in order for the post-merger increase in concentration to generate significantly more market power. Typically, if it is a very competitive pre-merger market, most mergers will not increase market power enough to cause concern.

In conduct cases there is a different focus. In a conduct case, the investigation typically starts by establishing that the party under investigation has market power. A case might then try to establish that the party leveraged its power from one market into another market, or used its market power to raise rival's costs or disadvantage a rival in some anticompetitive way. So in many of these cases you establish the existence of significant market power as the first step in the analysis.

I want to talk about one particular case that actually provides a counter example to what I just said. I worked

on the FTC's Intel/AMD investigation for several years. In that investigation Intel was investigated for offering computer manufacturers (OEMs) large rebates if they refrained from using (or used a small percentage of) AMD CPUs in their business desktops and notebooks. The antitrust concern was that eliminating AMD would allow Intel to set high prices for CPUs which would keep computer prices high. These high prices would extract rents from consumers. Intel would capture these rents through high CPU prices and then distribute some of them back to the OEMs in the form of those rebates. Most discussions of this case focused on whether Intel had monopoly power in chips, which they probably did. The case settled and so was never litigated. But an interesting part of this case is that the most important market power concern was not Intel's market power but that Intel executed these exclusivity or loyalty agreements with enough OEMs downstream that those OEMs jointly had market power. The actual harm from this case came because the exclusivity caused prices to be higher for the vast majority of computers, and that harmed consumers. Had Intel not had exclusive deals with enough OEMs that jointly had market power, consumers could have left the OEMs that had the higher prices and the exclusive deals with Intel and gone to competitors that didn't have the exclusive deals, which would have had lower (competitive) prices. In principle, that case could have been brought even if Intel didn't have any market power at all. All they needed to do was organize a large enough group of OEMs downstream who jointly would have market power to create the antitrust harm to consumers.

MS. LERNER: So let's talk a little bit about identifying market power. And either Romy or Pat, both sides, what type of screens do you use to test market power?

MS. ABRANTES-METZ: Well, there are a variety of approaches that should be undertaken in general. Obviously, one of the first parts is what is the market share in the relevant market? But just like in the case of coordinated behavior, you have to analyze whether that market share is 70 percent or more, whether there are other characteristics. Because just having market power means it has the ability potentially to move and affect prices in a certain way, doesn't necessarily mean that you will do it. But there has got to be usually more conditions that need to be analyzed, such as are there barriers to entry, and what is the size and the type of competitors that are present. Are there economies of scale, elasticity of demand and similarity, homogeneity or not of products? I think in a lot of the industries there are a lot of natural experiments that can be studied to attempt to determine whether market power exists.

For example, the FTC, and I remember back in the past I used to also help in these studies, looking into oil and gasoline markets when there are pipeline disruptions to understand whether there was a significant increase in prices, how long did it last, how quickly was additional

oil or gasoline moved into the market? So all of these natural experiments are important to understand whether there is an ability to raise prices. This is common to any industry. Now what is particular about multisided platforms is that in this case pricing is a multi-side process. So just like economists understand that when we have complements and substitutes, we need to take into account the effects of those prices of those products into the demand of the specific product.

The same kind of effect exists when we have multi-sided platforms. We have what is commonly known as indirect network effects where, for example, imagining Facebook, if you have an account at Facebook and if you are connected, as I am, with friends from Europe—where I am from—whom I don't see for decades, it is so much more valuable to me that Facebook allows that connection, and the more of them the better. So, the demand for the particular product is going to be directly linked to either the size or the quality of customers on the platform, and that is what is the solution of multisided platforms from a one-sided firm. It is important for that to be taken into account when we are talking about market power. Because the effect from one side of the platform will likely affect the side of the platform we may be more interested in.

So depending on the cases, there may be cases where the feedback is stronger and cases where it is not as strong. But those effects need to be considered. And when you talk about constraints on raising prices on one side, those constraints may end up coming from different sides of the same platform or any side of a leading platform. There is also potential that typically there is some critical mass that a platform obtains to function at a certain level. This can potentially raise barriers of entry, and it can also limit supply side interchange ability. So all of these need to be taken into account. When we are looking at other measures of market power, for example, comparing price to marginal cost, as we discussed earlier, the ability to price above marginal cost, that is not always and frequently the right measure to use in multisided platforms. To start, many of the products are free on one side of the platform. And even if they aren't, others may have a marginal cost that is almost zero.

So adaptations and new measures need to be developed. Talking about market shares, for example, if normally the market share is going to be value based, then if the price is zero, you cannot compete in market shares traditionally. There are a variety of challenges that have to be overcome. And not all of the tools have been developed yet for multisided platforms in order to incorporate all of these effects. Sometimes you can take them into account, apply the standard techniques to a one-sided firm and being mindful of all these other effects. Other times we may be able to adapt those. For example, if a platform provides certain products in a fixed quantity, in a fixed proportion across sites, you may be able to build a price index with

which you compare price versus marginal cost. Other measures could also be tested; for example, profitability.

There are other cases that we always know that moving into profitability and looking at the profitability and making use of accounting measures can sometimes be challenging, but it is a possibility. So even though the principles are similar and are to a great extent the same between a one-sided firm and multisided platforms, there are additional challenges created by the interdependance of demand that should be ruled out as a starting point and should, in most cases, be considered.

MS. LERNER: So much to follow up with there. How about just going back to screens in general, and outside of multisided markets, is there anything specific that you want to look at with your screens in a digital market.

MR. DeGRABA: So the agency still looks at concentration measures, the Herfindahl Index, which is just a square of the market shares of all the participants in the market. This has been used since the 80s. The 2010 Merger Guidelines has a nice section that outlines the concentration levels that are very unlikely to cause a problem, concentration levels that might cause a problem, and concentration levels that will be presumed to cause a problem. They look both at the post-merger level of concentration and the change in concentration that comes about from the merger. So when a merger of two companies with large market shares occurs, that is usually more of a problem than a merger between two companies with small market shares. The larger the companies are that are merging, the bigger the changes are. I'll leave you to the Guidelines if you actually want to go through the numbers to find out the details of the HHI.

Much more recently, the 2010 Guidelines introduced what has been called in the literature upward pricing pressure, or UPP, and the UPPI, the Upward Pricing Pressure Index. The measure of UPPI is based on the diversion from one merging party to another merging party. When merging party, A, raises its price, some customers will stop buying from A and go to the other merging party, and that's called diversion. So the upward pricing pressure takes a measure of diversion from one merging party to another, and multiplies it by the profit margin on those units that are diverted. Typically, you care more about the upward pricing pressure when you have very differentiated products. Market share alone may not tell you very much in differentiated product markets, because those products may be very different, in which case they would likely have very little competitive impact on each other; i.e., if the products aren't very good substitutes, they don't constrain each other's prices. When two such products merge, there is not much diversion from one to another. So when they merge you don't get much of a price effect. Typically, you'll look at the upward pricing pressure in markets with differentiated products. For products that tend to be more homogeneous, the Herfindahl Index or market share is actually a very good

predictor of when you'd expect to see significant postmerger price effects.

MS. LERNER: Great. Let's look at barriers to entry in a digital context, digital markets. What does empirical evidence tell us about how to figure out whether today's winners are really going to be tomorrow's losers? Any lessons there?

MS. ABRANTES-METZ: We have already seen there is a lot of rotation in this industry, and I'll give a few examples later. I would like to start by addressing the fact that the Wall Street Journal article and others do compare a lot of big size companies, multisided platforms in existence today to very large firms from the last century and say because those were regulated we should regulate and break these ones apart. I think even though there are similarities between these companies, these two different sets of market leaders, I think there aren't enough differences. I am of the opinion that we are not at a point in which we should do that, in particular, because these are typically industries where there is a lot of very active competition. There is a lot of innovation developing very quickly. And there are low barriers to entry.

You know, trying to start oil extraction is a lot more costly than sitting in my living room and trying to write code for a new platform and hire a bunch of friends to do so. And we know that's the story of the beginning of many of those industries. So there has been enough empirical evidence that there is rotation. That small players enter without basically anything and displace large players. For example, we have obviously the example of Blackberry and Microsoft in mobile phones, and AOL in messaging and Yahoo in big news online. There is enough evidence that I don't think we should be concerned at this point. That doesn't mean that there couldn't be and there are companies that have significant market power, but that does not always have to be bad either.

So I think the analysis needs to be who has been hurt? Have consumers been hurt? And from what we can gather now, in general, what we see is consumer's choices are increased and prices are typically dropping. So there is rotation. There is entry. There is exit. There is new entry. There are leaders being displaced. I think that's healthy to see in an industry.

MS. LERNER: Do you have anything to add?

MR. DeGRABA: I think I'll stay with what you said.

MS. LERNER: Let's move onto the type of data that you look at when assessing market power in the digital context. Is there any specific data that you look at? You touched on this a little bit, but in particular what data do you look at if the product is being offered for free?

MR. DeGRABA: So before I answer that, I will remind the listeners of my disclaimer that nothing I say here reflects the opinion of the Commission or any Commissioner, and anything I say is my own opinion. So there are plenty of digital markets where you could still look at concentration measures. Where services are sold, one can calculate market shares based on revenues. To the extent that the services are offered at no charge, you can look at the shares based on quantity. For example, in the FTC's 2012 Google investigation they did notice that a very large proportion of online searches used Google.

So now I'll venture off into my own opinions here, and talk about a notion that at least I haven't seen anyone fit nicely into, the notion of market power. And I'll call this the "go to site," by which I mean when end users want to do something, most of them go to the same site. I think Google falls into this category. Most of the online search today is done on Google. Now is that enough to really to say that Google has market power with respect to end user customers? Often when you think of market power, you think there are customers who cannot switch to other good options. When I think about search, there is nothing that keeps me from going to Bing or to some other search engine. So while the market shares suggest most consumers prefer Google to other search options, it is not clear how many would switch to another engine if Google tried somehow to extract rents at the expense of end users. One can think of Amazon as being another example. A lot of people buy things on Amazon, and they have a large share of online retailing. But there is nothing that keeps me from going online to Walmart and buying from them if they offer a better deal than Amazon.

One may also consider that a large online firm might be big enough to have an anticompetitive or competitively unfair effect on its competitors. For example, in 2012 the FTC investigated Google for a number of alleged practices. In a statement explaining why they closed the investigation, the commission stated that one concern was that "Google placed unreasonable restrictions on the ability of advertisers to simultaneously advertise on Google and competing search engines, or multihome." This could raise advertisers' costs of dealing with Google's rivals. At the close of the investigation, Google committed to refrain from this conduct in the future.

MR. HOCHSTADT: Great, thanks, Pat. So Nick, you started us off with the why do we care question. So now bring us back to some of the enforcement actions, and maybe let's start on the merger side of the house. What do the closed investigations by the DOJ, FTC tell us about these issues of market power when it comes to these digital players? Are they game changers or just arguments that will convince?

MR. GAGLIO: I really think it is the latter, frankly. One of the takeaways is, as always as a litigant, if you can substantiate your story with evidence, and particularly this story about entry, then you are going to have a better chance at convincing the agencies that you actually either don't have market power or can't exercise it. And I would

be interested to hear and pick up on Pat's comment, but the role of disintermediation is a constraint on exercising the theoretical market power you have.

If we look at Expedia/Orbitz, for example, that's kind of an easy one for the agency, frankly. Because you have actual entrant evidence in the preceding 18 months. They characterize it as new, innovative. And when obviously combining that evidence and entry with an absence of substantial head-to-head competition between Expedia and Orbitz, they found that hotels and other providers weren't necessarily viewing those two as direct substitutes. So it was less that Expedia or Orbitz didn't have any market power, but that the other market structures and that evidence of entry I think led the agency to approve it.

Another similar example, maybe a bit more challenging, was the Trulia/Zillow merger. Where on some narrow market level you can say that this is the one/two realtor sites, and so you could say perhaps there is indirect evidence there of market power. But when you actually got into the analysis—again, the agency spent six months looking at documents from the parties, talking to industry participants—and again you have a lack of diversion. You have real entry from other participants. And you have, frankly, realtors not necessarily relying on those two for placing their ads. So frankly, the closed investigations show that the traditional toolkit that the agencies have is still capable of getting to the right result, even if the superficial analysis is suggestive of market power.

Further, to the theme of the saying the more things change, the more they stay the same, look at the *Draft Kings/Fan Duel* merger, which was abandoned, or look at the *Bazaarvoice* case, which obviously DOJ successfully litigated a year or so ago. If you have internal documents that speak to an enormous unilateral effects theory, if you have merger rationale documents that talk about enormous enhancement of market power, you are not going to waste time arguing with Pat, how do we define the marketplace? You've got an enhancement of market power problem.

Just to drill into that a little bit on the *Draft Kings* case. As you got into the parties' documents, these are basically the two biggest daily fantasy sports providers. Everything in their documents seemed to suggest that contests, structure, entry-free price, prize levels, all these vectors on which these two companies were competing seemed to be informed by each other. So that makes an easy call for the agency, and you don't actually have to have this argument about indirect evidence of market power. Similarly with Bazaarvoice, and I am thinking here particularly of a speech not too long ago about the difference between the competition for the market and competition within the market, and you really have the sense that Bazaarvoice felt the PowerReviews acquisition was going to create this kind of syndication barrier to entry and was going to lock the store. And that's what I think convinced the court more than anything, and convinced DOJ to bring

the case in the first place. In that sense, we are not talking about having to rejigger our analytical framework. It is the same, what do the actual merger documents say, and what is the evidence of substantiation of entry?

MR. HOCHSTADT: Let me pick up on the Zillow/ Trulia transaction you mentioned, and maybe, Pat, I'll throw this your way. Is that an example of the agencies looking at a platform and looking at effects on both the realtor side and on the consumer side and showing today the agencies in their investigations are looking at the full effect when you are dealing with platforms?

MR. DeGRABA: So that's an interesting merger in that a couple of commissioners actually put out a statement and explained why they closed the investigation, which means I can talk about it—at least to the extent that what they said is public. That was interesting for a couple of reasons. One is that they really looked at each side of the market by itself. One potential problem was that real estate agents advertise on Zillow and Trulia. So one of the markets that was at issue was whether the price of advertising to realtors would increase. The other side of the market dealt with consumers who go to the websites to go look for homes.

On the advertising side, they looked at evidence of head-to-head competition between Trulia and Zillow. For instance, they looked at cities where Zillow had a presence and Trulia didn't, and compared the advertising rates there to those in cities where both of the companies had a presence. They didn't find that the price of one firm depended on the presence or non-presence of the other. They also noted that a very small amount of advertising spent by real estate agents occurred on these portals, and that there were many other places where realtors could advertise. I don't think they said it explicitly, but it looks as though the market for advertising for real estate agents is much bigger than just online advertising. So you had both online channels, and channels that are not online, and the market included both of these channels of advertising.

On the consumer side, the question was: Was there any likely harm to consumers? And there the evidence was that there were other real estate portals that consumers could look at, such as realestate.com and Redfin. They also found that because Trulia and Zillow were selling advertising, they had an incentive to keep consumers using their portals, and they had incentive to continue to innovate and make the portals better. So there was unlikely to be any reduction in innovation or reduction in quality as a result of the merger.

MR. HOCHSTADT: Thanks, Pat. Going back to some of the closed investigations, you talked about the Bazaarvoice, a litigated case, can you speak to us in terms of how do we harmonize the closed investigations? You talked about Expedia, Orbitz. You could talk about Sirius/XM, where the oncoming of the streaming services

was a big factor in closing that investigation. But then you've got Bazaarvoice, Staples/Office Depot. Is there a way to harmonize those cases, or does it just boil down to a few guides or documents? And there is a market and a strong unilateral effects case, digital entry and those sorts of arguments are not going to be sufficient to overcome the presumptions that come from increased market shares and the unilateral effects there?

MR. GAGLIO: Yes. I think this goes back to what we were talking about, frankly, with the flexibility of the agency's approach to handle different situations. On the one hand, when you have something like Expedia/ Orbitz, kind of an easy call, because the entry had already occurred. Sirius/XM was an interesting example because there it was a combination actually of evidence of some nascent or even potential entry from streaming services, but which, frankly, at that point had not really taken off, certainly not in the way that all of us are dependent on them now. Because of the nature of the competition between Sirius and XM, particularly that they had essentially locked up each other's positions with various OEMs, in the agency's view there was a relative lack of head-to-head competition in the medium term. That actually created a runway to allow these nascent alternatives, in terms of streaming media, to emerge.

To contrast that with your own experience, obviously, in Staples. I think that the lack of an Amazon business thrust into that market was compelling to the agencies, is the real key difference. There wasn't, in contrast, a runway to allow Amazon to build up. If you think about the Merger Guidelines, timeliness of entry has been part of the agency's toolkit for ages. And I think these cases really show—it doesn't matter if you are in widgets or the digital economy, the agency is going to assess the sufficiency and timeliness of the entry.

MR. HOCHSTADT: As Nick mentioned, we represented Staples in the case, and I won't comment on this too much, other than to say the judge in his decision said he had the unenviable task to try to figure out if Amazon, particularly in the office supply space, could have entry in a timely, sufficient, and likely manner to displace the perceived lost competition from Office Depot. That is the challenge in these cases—to try to build a record that can convince the agency or the court in a prospective looking exercise. We talked about Sirius/XM back in 2008. Pandora, Spotify, where were those players back then? So it certainly is a challenge. It is the kind of thing nowadays you find when you are dealing with the agencies that you are coming in early on with economists to try and develop these entry arguments and to try and win the battle with the agency very early on at this point, and what kind of record you think you need to create to really overcome any unilateral effects or structural presumptions.

MR. GAGLIO: I think the answer is yes. So if you come in as early as you can with that type of evidence, like it always is before the agencies, you come in and you

get right to competitive effects, right. As we were joking earlier, if you can avoid arguing to Pat about the indirect and the structural point, and get right to the reasons that the merger is not going to enhance market power, I think many of us feel better off. So if you don't have actual entry, like you had in Expedia/Orbitz, you turn to the incentives that are actually driving innovation by your client. You want to be able to show that what's driving the quality or the price competition for your client is not your target, obviously. I think that was the big problem in Fan Duel/Draft Kings, because they weren't able to successfully point to any other competitive constraints that seemed to be driving what was otherwise a very frothy market to try and become the dominant daily fantasy player. Again, it sounds a bit like a broken record, but none of these is different. There has been a lot of commentary about why we need to change the toolkit. But none of the types of evidence that we're talking about is really that different from any other industry.

MR. HOCHSTADT: You are getting ahead. We are going to address that question about whether the toolkit needs to change. But let's first touch on moving from mergers to unilateral conduct cases. In this area, digital economy, unilateral conduct cases, what's the best guidepost out there? Is it still the *Microsoft* case from the D.C. Circuit in 2001? And what does that tell us, what guidance does that give us in terms of this area?

MR. GAGLIO: It is a helpful guidepost for a practitioner, in part because the court showed a real willingness—and you know, it is interesting to think this is already 18 years ago now—but to show a real willingness to look at both indirect and direct evidence of market power. Folks will recall that after going through and deciding that the sort of nascent middleware companies in terms of Java and Sun were not true competitors to be considered in the marketplace with Microsoft, it didn't stop there. It said so we've got substantial market shares, a presumption of market power. But then it engaged with Microsoft to determine whether or not some of the arguments Microsoft made really showed direct evidence of, as Microsoft is showing, an absence of market power. They pointed to R&D spending that they said a monopolist would never be able to actually engage in. They tried to look at the price of Windows and suggested that that wasn't actually at the maximum short-term profit maximizing level.

The court did a couple of things that were interesting. I think first of all, they refused to—and again this is jumping ahead to our question—they refused to say that because this is a dynamic technology industry, we need different rules, so we're not going to say that you have to look at direct effects and that you can't rely on the structural presumption. So that's why it is still important to worry about this, as I said from the outset. But secondly, they really took that evidence on. So from a practitioner's perspective, there is always an opportunity to end

up with a different result from *Microsoft* if you can show that the incentives that are driving your client's quality improvements, that the spectrum of entry—like disintermediation altogether where you have a market changing effect—if you can marshal that evidence, then I think the framework the agencies are using is adequate.

MR. HOCHSTADT: One more on *Microsoft*, and this touches on something Romy said about empirical evidence, the rotations, and the low barriers to entry. How much do you feel like *Microsoft* and its guidance for today was driven by a very high market share that the court believed was durable over time, as opposed to being transitory?

MR. GAGLIO: I think the durability was important. Maybe we will get into this on a discussion of network effects. I think it was the lack of likelihood of that being disruptive in a relatively short time. Absent the applications program interface problem, if Microsoft had been able to show that Java's ability to have a multi-honed framework for developers to bring new applications to the table, I think the entry story would have been more compelling, and the result might have been different. So was it durable? Yes. But I think the entry, more compelling than it really was, could have overcome that.

MR. HOCHSTADT: That's helpful for guidance in terms of today, going forward. Let's turn to the question we have been itching to get at and touch on it from both a legal and economic side. From the economic standpoint—and Romy and Pat, I'll open it up to you—do you think economic thinking needs to change further? Does there need to be more evolution when it comes to thinking about market power in the digital economy? And I mention that only because economic thinking and its evolution has been a big driver of antitrust law, especially over the last half century. So do you feel like the current economic tools in the toolkit can analyze the current players that we have or there needs to be further thinking?

MR. DeGRABA: I haven't really seen a weakness or a case where there was a big gap in the economic analysis. The profession has a decent understanding of things like network externalities. That's one situation in which you can think of size as actually creating market power. It can be hard for a competitor to enter successfully, because if the majority of customers are on an existing network, the existing network is more valuable for all of its customers than an entering network with few customers. So that's one situation in which large share can be a sources of market power that can be durable. In general, though, largeness by itself, isn't an offense. Large share doesn't necessarily grant market power just on its own, nor is it necessarily a symptom of market power. I think that the rest of the toolkit, including looking at options that customers have, looking at diversion from one type of firm to another, when you look at the rest of the standard toolkit, it seems to pretty well deal with the market power issues.

MS. ABRANTES-METZ: I tend to agree with that. I think the economic theory is the same. I think that what is important is to have in mind that if you are to apply one of the traditional tests that were essentially developed for a one-sided firm, you need to be conscious that there are other effects that need to be considered. Now, if one wants to have measures that are more directly applicable to multisided platforms, those ideal measures have not yet been developed. I think as more and more complex applications show up, economic applications of the theory will develop further. But the structural thinking about how to approach the problem, as long as those externalities are accounted for, is the same.

MS. LERNER: So just following up on that, and I think we can all expect where Nick is going to land on this, but do you think that our antitrust laws are flexible enough and have evolved enough to deal with market power in the digital age?

MR. GAGLIO: Yes. And I sort of spoiled it from the beginning. But I think there are a couple of interesting points here. I mean there seems to be a fair degree of consensus across the political divide, at least at the agencies, that the toolkit has flexibility and there are some nice features from both. Commissioners Ohlhausen and Sweeney in the last six to twelve months are both making the same point there. If you think about what we have been talking about, the nature of looking at both direct and indirect evidence of market power, considering entry, you know, this is something that the agencies have been doing a long time. The facts of entry may be somewhat more complex if you are talking about a platform market, as Romy was talking about, and the need to consider some of the crossplatform elasticities and what really drives pricing decisions, particularly when you have asymmetric pricing on either side.

Do network effects in markets, where it tends to be a little bit of a winner take all for either the most efficient player or the first mover, does that need to be considered in a somewhat different way? Perhaps. But at the same time, I think the agencies have proven up to the task to see whether there are competitive constraints driving innovation, driving customer quality. Romy mentioned *The* New York Times article, and the one thing about this comparison to Standard Oil and some of these other companies, these giant companies today are driven by innovation. And as I think the article mentioned, they are pretty beloved. I don't know how I would drive somewhere without Google Maps and from the benefit of Waze. I think a lot of us take a lot of value from being able to shop conveniently from Amazon. So it is interesting to me there is a lot of gnashing of teeth, particularly from competitors of these successful companies. But if consumer welfare is being harmed, a lot of consumers don't seem to be aware of it.

MR. HOCHSTADT: Let me get into that. What about the issue of data, right. So we have been talking about

when you are trying to analyze these digital players, and some of them may be offering free services and the like, so it is hard to do market share calculations. But what role does data and the amassing of data and the ability to control data play in your thinking about whether or not a firm has market power?

MS. ABRANTES-METZ: Well, a few months ago the *Economist* had a good article about how dangerous it is to have all this data compiled about users and how that can potentially drive to the inevitable situation where we have essentially permanent monopolies. Again, going back to what we said earlier about how easy it is to enter into these markets, I think that could not be further from the truth. That doesn't mean that data is not an advantage. That there isn't a critical mass. The empirical evidence is that so very many companies have started without data. Namely, Facebook in India, when it started it had no Indian users so it had no data. But a few years later it was leading in that area in India.

Spotify, the same thing here in U.S., competing with Apple iTunes. So there are enough examples to show that this is not an inevitable situation. Now could abuses occur? Yes. And I don't think that the agencies should be sleeping on it and should keep an open eye for potential anticompetitive behavior. But I do not think it is at the level of concern that I often see in the media.

MR. HOCHSTADT: One other legal question I want to follow up on with Nick in terms of the competitors gnashing teeth and so forth. So Nick, we hear sometimes in the articles on predatory pricing jurisprudence requires under Brooke Group a recoupment element—which I am not aware of where anybody has proven that since Brooke *Group*—and monopoly leveraging, not entirely sure what the Supreme court did or didn't do with that in *Trinko*. From your perspective, is there an argument to be made that the current, especially in the single-firm space jurisprudence, is too hands off and too restrictive, because the traditional boxes don't fit a player who may be willing to grow market share at the expense of making a profit to drive out its competitors? Or is it your perspective that the current lay of the land in Section 2 single-firm conduct has the right legal tests, because ultimately it is consumer welfare at the end of the day, unless there can be a showing of harm to price or reduction of output or quality of innovation, so what?

MR. GAGLIO: Probably no surprise, I think it is the latter. It is always useful to think about first principles and so the Brunswick admonition, that the issue is what happens to competition and not competitors. It is somewhat complicated in the digital space where when you get a huge investment and you get huge innovation, and as a result for some short amount of time or indeterminate amount of time, you may benefit from a network effect barrier that allows you to profit from that innovation, and that is sometimes the incentive for making that innovation in the first place. That in and of itself—and I

think it is clear under our current Section 2 jurisprudence, is not violative of anything. That is how we want innovation to drive investment. The focus of Section 2 is on something exclusionary, something predatory. That arms the agencies to be able to look at why people are doing things. Competitors complaining is a very different situation from consumers complaining. I think this focus on the actual exclusionary effect allows the agencies and the courts to get to the right conclusion.

If I could actually just pick up on something Romy said about data. One interesting thing from a practitioner's perspective is how the agencies are going to treat data in a particular situation. In some circumstances it has actually been a relevant product in their analysis. Other times it has been an asset that the merging parties simply have, and at other times it is considered a barrier to entry itself and analyzed that way. I think it is important to think about the different roles that data can play when you are going into the agencies as well.

MR. HOCHSTADT: I'll just pick up on one thing you said and go back to the basic principle of Section 2 monopolization, not becoming a monopolist, because that ultimately is the incentive or the reward.

MR. GAGLIO: Absolutely.

MR. HOCHSTADT: Pat, Romy, Nick, do you have any final thoughts for the audience here, based on the topics we have been discussing here today?

MR. DeGRABA: I think that the consumer welfare standard is still the hallmark of the analysis. I talked a little bit about the Zillow case. The commissioners also released a statement when they closed the Google investigation. I think that statement supports the notion of the consumer welfare standard. The investigation included, among other things, concerns about bias advertising. The claim was that Google placed some of its own properties more prominently within its search results than competing properties. That is, they changed the way they presented their screens, in that some of their own vertical search companies, which are search engines narrowly tailored to a specific market, were presented prominently, while competing properties were pushed farther down the results page. The FTC looked into this and closed the investigation. On that particular count the Commission basically found that, after investigating the documents and both Google and industry practices, they believed the changes in the way that Google presented their screens had made consumers better off, and the changes were implemented to allow consumers to have a better experience. They also noted that other general search engines were also changing their reporting of results in similar ways. This also bolsters the notion that the changes were implemented to make consumers better off and not just to make competitors worse off. The commission recognized that some competitors were made worse off by the way the screens were reconfigured. But as long as consumers

benefited from the changes, they were not going to press a case in this area.

MR. HOCHSTADT: Thank you, Pat.

MS. ABRANTES-METZ: May I just add, from an economist perspective, in thinking about digitally how firms compete, I think this is a particularly interesting industry area of economics both, theoretical and empirical, and the relevant aspects of antitrust, because it has so many components that do not favor long-lasting market leaders. As we discussed earlier, yes, firms do figure out ways to keep being leaders. Obviously, the example of Microsoft was how particular practices were used, many of them at the end, that are not found to be a violation, but how so many of these strategies are not necessarily illegal. And the economic theory does show that many of them, such as for example tying, can have pro, not anticompetitive effects. So, from an economist standpoint I am looking forward and expect to see in the future how firms will develop new strategies in such a dynamic fast-moving industry to figure out how they can keep their position in a legal way.

MR. GAGLIO: The answer is to continue to innovate and drive value for their consumers. In thinking about the digital economy, I think the commentators who urge a change in the standard seem to be particularly worried about this winner-take-all framework. It is important for people to remember that a relatively high level of concentration might be characteristic in some of these so-called winner-take-all markets because of network effects, but it does not mean that those markets aren't contestable. They are frequently contested by market changing and disruptive innovation. Perhaps even more importantly, they are often heavily contested before a winner emerges. I think the agency in *Draft Kings/Fan Duel* is in a position to protect that competition for the market before it actually is decided. By the same token, I think we can be a little bit sanguine, once the winner has emerged, that as long as they are continuing to innovate and be customer focused, if the loser in that situation is concerned, it is their right to run to the government. Let's not pretend that's perhaps just a form of rent-seeking.

MS. LERNER: We are almost out of time here. I want to leave a few minutes for questions. Any questions from anyone in the audience? Yes, go ahead.

AUDIENCE MEMBER: I think it is fair to say that the European Commission has been more willing to bring abuse of dominance cases in the digital economy and against nuts and bolts companies than the enforcers in the U.S. Do you on the panel think that the approach in Europe is just plain wrong?

MR. HOCHSTADT: Do you want to start that? Good question.

MR. DeGRABA: There seems to be less of an explicit consumer welfare standard. It seems as if in Europe, if you

have a dominant position, there are certain things that you just can't do. We certainly don't have that here. So yes, they seem to be a little more aggressive than the U.S. agencies. I'll actually mention this briefly. One portion of the Google investigation looked at allegations that Google had scraped information on competitor's websites and passed it off as their own, and that Google threatened to remove from Google's search results entirely those rivals that complained about this practice.. The Commission's closing statement says that Google committed to refrain from this conduct in the future. In that instance the concern was that Google's size could allow it to successfully threaten customers. So, when there was some harm, I think the agency went after it, but the agency's action was narrowly tailored. They found a specific harm and went after the specific harm.

MS. LERNER: I have to take my moderator hat off for one second and just say that I think sometimes in U.S. antitrust law we find we are trying to fit a square peg into a round hole. And we know when we see it and somebody can scream anticompetitive, but it is just working in the framework. The European laws are just far more flexible. I am going to guess that Nick's response will be companies need to have certainty and they need to know when they are violating the laws. I certainly do give some credence to that, but sometimes there is conduct that just smells so anticompetitive and you can't approach it from the U.S. law. Yes.

AUDIENCE MEMBER: You talked about the possibility of how to think about it when a firm has a large market share, but might not have market power. And I wondered if you had any observations about the inverse of that. I am thinking about the possibility of a firm with a small market share having market power, and obviously, I am thinking in particular, about the AMEX case and what really happened there? I wonder if you have any observations on that particular issue?

MR. GAGLIO: To me that just begs the question of what the right measure is. And obviously, we are all eagerly waiting for the Supreme Court to put us out of Suzanne's misery. But I think if you look across the platform and you really do see cross-elasticities, then either will decide that they actually do have market power or more than likely that absence of market share really doesn't actually translate to any market power. The way you would intuitively think of it to me is what's most interesting. The Supreme Court has the opportunity to say you do have to look at both sides of the platform, if there is evidence, as I think the Second Circuit thought, that the way pricing decisions are made on one side impacts demand on the other and vice versa.

MR. HOCHSTADT: One more thing I'll add to that, picking up on what Romy said, from an economic perspective it will be interesting to see what the Supreme Court does in terms of any bright-line rules. Because we are talking about network effects where the feedback

might differ, depending on the companies that you are talking about, it will be interesting to see if there are any bright-line rules that come out of this versus a much more flexible case-specific approach, which has been the tradition of antitrust for long time. Way in the back.

AUDIENCE MEMBER: This is really for the economists from the beginning of the discussion. Isn't it silly at this point to say that market power is the ability to price above marginal cost, and then market power equals monopoly power. When it is a matter of degree? I know that is the classical definition, that anybody with a differentiated product has market power which is the same as monopoly power. It all just seems quite silly. As opposed to the matter of degree in whether a firm or a set of firms is constrained in setting their price, their output or their innovation. So we always have these discussions about market power that start off with if a firm can charge more than marginal cost, they have market power. It just seems completely disconnected to reality in what cases and practitioners are really doing when it comes down to assessing market power. So when are the economists going to give that up?

MR. DeGRABA: So I will say that I taught in business schools for nine years. And while I taught that in the perfect competition model, equilibrium price equals marginal cost, I also said that this existed almost nowhere in the world. Because if your price equals marginal cost, that meant you didn't want to actually increase your sales at your current prices. And I asked my MBA students, who had business experience, does your company not want to increase its sales at the current price? Of course, the answer was no. The competitive price is something a lot more like the long-run average total cost. I wince when I hear the phrase price equals (short run) marginal cost, because it typically doesn't. It virtually never does. And I've got to tell you, if I could find a decent definition that distinguished market power from monopoly power, I'd listen to it. I just haven't seen that yet.

AUDIENCE MEMBER: So I have a simple question for the panelists on market power in the digital economy. We can go left to right. Does Microsoft have market power in desktop operating systems? Does Google have market power in general search? Does Amazon have market power in the online sale of books? Simple question.

MR. GAGLIO: I am going to punt.

[LAUGHTER]

MR. DeGRABA: So, wow, I am going to get myself into a lot trouble now. I think there are three different analyses for these three companies. The market power story for Microsoft is based on network externalities, which means that an individual user gets more benefit from using a product when more customers use the product. Customers benefit directly when their computer and their software is compatible with the computers and

software of other users with whom they want to interact. Additionally, more software is written to work on operating systems that have the widest distribution. Microsoft being the dominant operating system for x86 machines benefits from this. If I were to switch from Windows, my computer and work product likely would not be compatible with many other computer users and much of my existing software would not work as well or at all. These switching costs are the foundation for a market power story for Windows with existing customers, and forward looking new customers.

For consumer search, Google does not benefit from such direct switching costs or compatibility externalities among its customers. As a user, there is nothing that prevents me from searching somewhere else. I typically go to Google because I like the results that I get better than those from other search engines. If one of those engines returned better results, I could switch to that engine tomorrow without incurring any switching costs.

But that's not the end of the story. Google accounts for a very large share of online search and publicly reports high accounting profits for its search products. So one should ask why other firms have not entered and/or expanded enough to erode Google's share and/or profits. It might be that Google has better algorithms for returning useful results, or in some other way is just better than others at giving consumers a better experience. It might be that because of its size, they have access to more information that allows them to return better search results, or there might be access to some other scarce asset that I don't know about. I don't know why Google seems to have a better product and a persistent market share.

Amazon. It's difficult to find many indicia of market power for Amazon. Their prices are just lower. They do have a large share of online retail, but they never seem to report an accounting profit of any material size for its physical delivery services. I do a lot of buying on Amazon, because I go to three or four other websites, and Amazon usually has the lowest price. I am a price-conscious guy, I am an economist. I don't know if Amazon's prices are lower because it has a lower cost of distribution, or is Amazon simply not taking profits that it could be taking?

I recently bought a bathroom scale on Amazon that arrived at my house in one day. I can't figure out why society needs 24-hour bathroom scale delivery capabilities, but I was happy that it came in one day. Should I be concerned that Amazon seems to be building the most efficient on line direct to customer distribution system on the planet? I see companies like Jet.com providing service in the same space, and I have bought things on other sites like the Walmart website. Here again, I don't have a switching problem out of Amazon the way I seem to have a switching problem out of Windows. And I don't know if there are some other facts behind what Amazon is doing that I don't know about to suggest they have market power. But from where I sit as a consumer and a casual reader of public information about Amazon with more economics training than the average adult, I am very happy Amazon is around.

MR. HOCHSTADT: I am so glad Pat fielded that question. I think that wraps up our time. I want to thank Pat, Romy, and Nick. Thank you all.

[APPLAUSE]

