

[00:00:04.150] - Tom Lenard

Good morning. My name is Tom Lenard. I'm a senior fellow and president emeritus at the Technology Policy Institute and welcome to TPI's Antitrust Conference. Antitrust policy has become contentious in the last, its a lot more contentious in the last several years than it has been for quite some time, and there's substantial disagreement about the direction in which policy should go and whether enforcement has been too lax and needs to be strengthened. The last Congress considered a number of antitrust bills along those lines, none of which passed, but at least some of which are likely to be introduced in the new Congress. And even without legislation, the current leadership of the antitrust agencies of the Antitrust Division of the Department of Justice and the Federal Trade Commission has adopted a more aggressive enforcement policy to discuss these issues. We have three panels this morning. I will start with a conversation with the chief economist at the two agencies and then move to a panel on reassessing the need for antitrust legislation and then conclude with the Biden Administration Antitrust Midterm Report Card. It's my pleasure to moderate the first panel, Economics at the Antitrust Agencies, with Susan Athey and Aviv Nevo.

[00:01:30.550] - Tom Lenard

Susan has been the Antitrust Division's chief economist since last summer. She's on leave from Stanford, where she is economics and technology professor at Stanford's Graduate School of Business. Susan is the recipient of many awards and honors, including the John Bates Clark Medal awarded by the American Economics Association to the Economist Under 40 who made the greatest contribution to the field, and she's currently also President Elect of the AEA (American Economics Association). Aviv joined the FTC as Director of its Bureau of Economics in January from the University of Pennsylvania, where he is George A. Weiss and Lydia Bravo Weiss Penn Integrates Knowledge (PIK) Professor with appointments in the Wharton School of Business and the Department of Economics as well as director of the Competition and Policy Initiative. He also previously served as Deputy Assistant Attorney General for Economics at the Antitrust Division. So welcome to you both, appreciate you both being here. Let's start out by talking about the role of economics at the antitrust agencies. Many in the antitrust community view the current leadership at the agencies as being less favorable towards economics and economic analysis than in previous administrations. And kind of on a related issue, there are reports of morale problems among economists, at least at the FTC, resulting in a number of departures from the Bureau of Economics.

[00:03:12.410] - Tom Lenard

So a couple of questions, and let me start with Susan. At the Antitrust Division does the current leadership place less weight on economics or approach economics differently than previous administrations?

[00:03:29.710] - Susan Athey

Well, this is my only administration, but to the best that I can understand, the answer is definitely no. We have a huge influence and I feel like the beginning of every conversation we have about a case is to start with the economics and not really let go of that and move on to legal issues until we've fully wrapped our heads around the economics. I think there's always been the tendency and a desire because of the legal environment you're in, to try to make things simple, but sometimes too simple can be wrong, and sometimes you need to be able to embrace complexity to get to simplicity. When you get the right economic answer, everything makes sense. So I think that what I see is a willingness and really a mandate to understand economics, and especially, I would say, the economics of the last 50 years. In the last 50 years, economics has developed much richer models that are more realistic and that map onto fact patterns, everything from imperfect information to bargaining and auctions to understanding things like price discrimination, bundling, exclusive contracts. The science of platforms in two sided markets is also relatively recent, but is really important for framing up problems.

[00:05:04.510] - Susan Athey

And of course, the last couple of decades have also brought a lot of innovations in empirical work and increased the standards of rigor. So I guess when I'm doing my job every day, I find that we are deep into the economics, and the economics is the starting point, and there's just really a requirement to engage in it and keep engaging in it until we understand the way competition presents itself in a particular industry. That's really the mandate. How is competition occurring here, and what are the right tools to understand that?

[00:05:46.410] - Tom Lenard

Okay, well, we will obviously get back to that as we continue the discussion. Really the same question to you with respect to the FTC, but can you also address the morale issue at the Bureau of Economics, if there is one, and how you propose to deal with it?

[00:06:11.730] - Aviv Nevo

Okay, so there's a lot there. Let me start with just actually continuing on a theme that Susan started. And I do have some experience in a previous administration. And my view is that there is no we don't have less economics. So to the extent that there's rejection of economics, it's of a very narrow part, a view of economics, or what sometimes referred to as the Chicago School economics. I think what happens now is where we're thinking about kind of wider set of theories and looking kind of, frankly, at a modern economy that presents a lot of challenges. And I think in order to do that, you really have to use all the tools of modern economics, just as Susan said. So if there's a rejection, there's a rejection of a very narrow set and a very narrow view of economics, but there is not rejection of a wider set. If anything, there's even more reliance on economics exactly for the reasons that Susan mentioned because we're actually looking at sort of big challenges that we're trying to (inaudible). Let me just say, speaking for myself and the FTC, we have an excellent working relationship with the commissioners, with the chairs, with the chair and with the other bureau.

[00:07:38.490] - Aviv Nevo

So economics is definitely kind of part of the FTC, and we're definitely sort of listened to. So let me now go to kind of the morale issue. The BE (Bureau of Economics) did go through a rough patch. There were some departures of some very good people. We went for a period without a director. And indeed, when it was announced that I'm going to be taking this job, the most common question that I got was people asking me, do I know what I'm getting into? Okay, basically say, look, it's a mess. Do you really want to get yourself into this? My answer was absolutely yes, I know what I'm getting into, and that's exactly why I took this job. And I took this job because I believe that we do need stricter enforcement. Going back to your previous question, I don't think that can be achieved without having a strong economic analysis. And that cannot be achieved without having a strong economics loop, whether it's BE at the FTC or EAG at the DOJ. You just can't do that. You need to have economic, so how do we achieve that? How do we make economics effective?

[00:08:57.040] - Aviv Nevo

So I would say there's really sort of three tiers that I tried to implement at the DOJ, and I'm trying to implement now at the FTC. So first of these is teamwork. We always need to work as a team. The economics or the economists need to be part of the team, working hand in hand with the lawyers. I used to say when I was at DOJ that I'm not sure that I know how we can win cases, but I know how we're going to lose them. We're going to lose them if the lawyers tried to be economists and the economists tried to be lawyers. We have to come as an economist and contribute what we can to the goals. So that's kind of peer number 1. Second tier is kind of staff development. Susan and I are very fortunate to work with the excellent economists at BE and EAG. And I think a big part of our role is to both rely on our staff, but also help them develop and really achieve the potential.

[00:10:00.410] - Aviv Nevo

Of what they can do. So that's always a big part of what I try to do, is not just take the staff is given, but work with them, improve their skills, improv training, improve research capabilities and everything that goes along with that. So that's kind of a second tier of what we try to achieve. And then finally, this is all to lead to producing high quality economic analysis. That's our job. And what I told our staff, or what I tell them when we meet with them, is I'd like in every single case to produce the kind of work that I would be proud to present to my academic peers. So we're not looking to sort of write a paper that will be published in Econometrica and AER and pushing the frontier of methods. But I'd like, in terms of answering a question, to be able to produce analysis that if I have to give an academic seminar defending the work that we've done in a particular case, I would not be embarrassed to present that to my academic peers. And we have the quality of staff and the ability to do that. And that's what we should thrive for when we're presenting economic analysis to our own principals.

[00:11:15.430] - Aviv Nevo

And this really kind of leads me into I think the main thing I think that economists and agencies want is we know we're not the decision maker, right? We have to present analysis to commissioners at the FTC, the AAG at the DOJ. They are the decision makers. What we want to make sure is that what we say is heard. And I can again speak just kind of closing the circle on this. Speaking for the FTC, I can speak that we are heard. The FTC leadership is listening to what we have to say.

[00:11:47.970] - Tom Lenard

I think one of you kind of suggested that the perception that economics has been downgraded is not correct, but it's really more that there's been a rejection of the Chicago of what's commonly referred to as the Chicago School, whatever that is. Two questions. One, is that roughly accurate? And two, what is your all definition of what the Chicago School entails?

[00:12:30.270] - Susan Athey

Actually, I think it's kind of confusing and people actually the way that we use the term in academics is even different than how it's used in antitrust. But I would just come back to say that it's less of rejecting one particular thing and it's more of just making sure that we are using the tools that are right for the problem and that you're not making extreme assumptions that assume away everything that's interesting about a problem. Or you're not assuming away everything that's driving firm decisions. So in the end, one of the things that makes working in policy different than academics is that you do investigations and you can see business documents and you can see facts and you can really understand how people are making decisions, what their incentives are, what the constraints are and so on. In academics, sometimes you can wave your hands, but something that you might assume in an academic paper might be demonstrably false. And so in this kind of policy, we're kind of disciplined really heavily by the facts and the data, but especially the facts about how competition presents itself. And so I guess in my job, we don't talk about schools or this or that.

[00:14:00.580] - Susan Athey

We talk about, okay, what's going on in this industry? Why do we see the structure that we see? What's motivating a merger? What's motivating this conduct? If there's a ton of profits? What has stopped other firms from entering and competing that away? What are the dimensions of competition? And so I just think of it as embracing the right answer, the right economic answer, rather than rejecting something. In particular, I'm talking about in the day to day work that we do, where, of course, we have merger guidelines which help us interpret what our goals are. We talk about how competition presents itself and what can be substantial lessening of competition. And we have case law that we're working with and that help us interpret the law. Our legal colleagues are helping us, as economists, understand what it all means for a particular case. But from the economic side, it's really about embracing, getting to the truth that's what I'm being asked to do every day is if you said, that's what we're asking our colleagues to do, what is the answer?

[00:15:28.250] - Tom Lenard

Well, also Aviv I'll give you a shot at this, but maybe I can add another kind of dimension to this, which is to have you talk about the consumer welfare standard. Obviously, there's been well, I think the leadership at the agencies have given speeches in which they have indicated that they don't consider the consumer welfare standard to be particularly useful. And so they're seen as moving away from that. That's probably related to the Chicago School type of question. So I guess what is your view and what is the view at the agencies of the appropriate role of consumer welfare and just economic efficiency more generally? Aviv do you want to take the first crack at this?

[00:16:24.220] - Aviv Nevo

Yeah. Let me just start and say I agree with actually everything that Susan said previously. When we say sort of rejecting something, it's not really about we sit there and try to define something and reject it. We just start taking a wider view of what's the right economics to look at a problem. And I think in some sense, that's kind of what's happened with consumer welfare. So I realize consumer welfare is getting a little bit of a bad rep. Some people are kind of pushing against it. But when you really dive and try to understand what it is that's being pushed for and not what's being pushed against, you really understand that what's being pushed for is just a wider understanding or a wider interpretation of what's meant by consumer welfare. And the truth is it's actually not one that's surprising to economists, right? So if someone takes a very narrow view of consumer welfare, you could think that's being pushed against, but what's really being pushed for is a wider interpretation of consumer welfare. So for example, the idea that quality and variety are included in measures of consumer welfare, I mean, that's kind of an obvious point.

[00:17:41.490] - Aviv Nevo

I would think any economist, of course they're included the idea that the impact of long term innovation can be captured by consumer welfare. I think it's an obvious point, totally not controversial, but to some folks who have kind of been used to thinking of consumer welfare as just being a very narrow price effect and the immediate price effect in a very short term, it might seem like, okay, that's what we're pushing against. But when I listen to kind of what we're trying to push for, it's all stuff that fits into a consumer welfare in terms of including variety, quality, the long term impact of innovation, it's just a question of are you doing kind of the welfare analysis properly? Even if we go to kind of issues of sort of saying, focusing or putting more weight on particular groups versus others, even that fits quite naturally within economics and consumer welfare, right? If you go back and think about first year graduate micro and we talk about the pareto frontier and talk about we can put different weights in terms of where social welfare function puts us there. It all fits within kind of, I think, very sort of standard economics.

[00:19:00.610] - Aviv Nevo

And all you have to do is just take kind of a wider view of the economics to really understand what is the issue. So I think ultimately really boils down to mostly a question of language and what it is that we want or not want to call consumer welfare.

[00:19:19.010] - Tom Lenard

So essentially what you're saying is there's no real,, I guess I'm trying to figure out if there is a departure from previous approaches and how to characterize it, and what you're saying is it sounds like there's really not much of a departure because all of those things, as I understand it, have been considered for a while.

[00:19:44.890] - Susan Athey

I would say it's not a departure from anything that I learned from starting graduate school in 1991 forward basically. But I think that there have been sometimes people can take things very narrowly or ignore everything that happened after the mid 1970s in economics and then also some of these things can be harder to quantify. So like the effect of innovation, it's going to affect future competition in markets and that effect is real and you can certainly document the effect on incentives, but if you don't know exactly what the future products will look like, it can be hard to quantify a future price effect down to the third decimal point. But that's not what we've been asked to do, and it's not required. What we're required to look at is the impact of mergers or conduct on competition. It's just basically not ignoring all the economics and not limiting yourself to things that are specifically quantifiable today because, say, products are exactly in market today. As an example.

[00:21:10.630] - Tom Lenard

To pursue that point, how do you see the relative importance of essentially a theory versus empirical analysis?

[00:21:23.530] - Susan Athey

I would say that just to start with, especially in more complex cases where you have lots of oligopolies of interrelated products going around, you've got multiproduct firms merging where the products are neither direct horizontal competitors nor are they in a very classic vertical supply chain where somebody is producing inputs that are going into somebody's production firm. We have a lot of conduct and mergers today where the relationships among products don't fit into either of those categories. And then theory is pretty essential, especially at the beginning of an investigation. But as I mentioned, in the end, if you're going to go to litigation especially, you're incredibly disciplined by the facts and the realities, the market realities. So I view it as very much of a back-and-forth. And that's the way I think for these complex investigations. That's how they go, that you look at the facts as you understand them and you map them into theory that helps you organize your thinking. We have simple theories that give us benchmarks, but often what you see immediately pops off the page is not looking like perfect competition. So that goes out the window pretty quickly.

[00:22:53.670] - Susan Athey

Then you look at the facts and it's empirical evidence about things that have happened in the past, event studies and so on. It's also documentary evidence and internal studies that firms have done. You put your theory against that, enrich your theory in various directions and make it better match the market realities. So it's an interplay between theory and empirical work. That's not so different from academics, except for that I think in this context we are more, academics will allow you to just abstract away from a lot and focus on one little thing, and here we really have to get it right and we can't ignore everything, that's something that's important. Ultimately, and especially in the more complex cases, theory does play a really important role in figuring out how to ask the right questions, how to organize your thinking, how to interpret data, which facts are relevant. I'm seeing it play out. I'm seeing it play out a lot. And I'm doing more theory in my regular job than I sort of thought I would. Now, I should clarify, that doesn't mean I'm proving theorems all day long or that our team does sometimes develop new theory.

[00:24:13.330] - Susan Athey

We certainly will tailor a theory to a circumstance if that's needed. But I think it's much more the theoretical frameworks and the collected insight from a body of theoretical literature is organizing the investigations and the analysis.

[00:24:30.710] - Tom Lenard

Okay, by the way, for members of the audience, there is a Q&A function. We have quite a few participants, but I don't see any questions yet. So if you have some, we'll try to have time to answer them. So let's move on to big tech, a big interest of everybody.

[00:24:52.960] - Aviv Nevo

Maybe before we move on, can I just jump in just quickly on this last point of theory versus empirical work and say that I completely agree with everything that Susan said, and I think the role of theory, as you said, I think it's really important in shedding light and kind of the investigative stage. I think also as we go to litigation, theory or economic theory is kind of the way we organize all the facts that we see, whether it's from documents, from testimony and empirical work. But I think as we go kind of more to litigation, the role of empirical work when possible, is very important. I think courts, at least as far as I can tell, have struggled quite often. And either they take our theories of either being too simple and say you haven't done any analysis, even though it's like, well, the analysis is kind of econ 101, that's really all you need. But they kind of feel like we haven't done enough or they feel like we've actually come up with these sophisticated, overly sophisticated theories that they're struggling with occasionally actually call expert economists or our models various names and so forth that I'm not going to repeat here.

[00:26:13.670] - Aviv Nevo

I think courts have actually often struggled with kind of finding that middle ground of having just enough theory that they feel like, okay, some analysis has been done, but not like, overly sophisticated, where

they get overwhelmed. Even though for us, we'll say it's well accepted theory that's been around for quite a while, we're not developing something new. I think that's where empirical work could really help. To say, look, this is not just a theory that someone is kind of made up, even though it could be very well accepted and very well regarded, but actually have some facts to support it. And facts, if we could provide data, empirical facts, that's quite helpful. So I think that's the ideal we can strive for. If you look at our successful litigation cases, quite often they turn on the ability to convince judges of the analysis, even if it involved somewhat sophisticated econometric analysis. Judges are, I think, are very prone and willing to listen to that. Cases we've lost a lot of times have lost not necessarily on the theory, but say, okay, the theory is fine, but where are the facts that support that?

[00:27:26.430] - Aviv Nevo

One concern that I do have with empirical work is that there's created a little bit of what sometimes people refer to as the CSI effect. This idea that sometimes we've created or the courts have created for us a burden that's just too high, that sometimes we can meet. Sometimes we have the data to do the sophisticated analysis. I've been involved in cases we were able to do that, but that's not always the case. You have to actually realize that, especially if we're dealing with kind of more complex industries, sometimes we're talking about future competition. So how do you run a regression about a nascent competitor that hasn't actually entered it? That's almost by definition an impossible task. I think that's something that's important that we don't create a burden of saying, well, we always have to have a certain level of empirical analysis because we're just not going to be able to meet that, especially as we go to more and more sophisticated industry in more and more sophisticated cases. I think just going back to the relative importance, I think both theory and empirical work are important and ideally we like to have both if we can.

[00:28:38.710] - Tom Lenard

So what is your view as to how we should treat nascent competitors or competitors that are not even nascent yet.

[00:28:52.670] - Aviv Nevo

Well, very carefully, as Susan said, and kind of look at all the considerations that we have. I can't give you now a prescription here that's going to treat all cases. I mean, that's the complexity of it. We should look at all the facts that are available to us and usually that would not involve actual data that we can run economic analysis on. So we should rely on whatever other evidence we have. And with the economics of the specific case. I think that's all we can say. Anything kind of more general than that obviously is not going to do justice to any particular case.

[00:29:27.610] - Tom Lenard

Right. So on the issue of big tech, from the economic perspective, what are the major challenges in analyzing competition issues in digital markets?

[00:29:44.010] - Susan Athey

I think one challenge that I alluded to already, that there's just these firms have a lot of different products and the relationships among the products are complex. I think maybe 15 or 20 years ago we hadn't still seen kind of the longevity of certain firms or certain market structures and we might see a particular set of conduct and it's sort of maybe the first time we've really seen something like that come up in a really big case. Now I think we have a fair bit of history and we've seen how industries have played out and we also start to see fact patterns emerge. And so one of the things, I think that the theory, the competition policy all along has been applicable. If you go back to the Microsoft case in the 90s, we've seen agencies and courts be able to grapple with, you know, modern economics and more complicated strategies on the part of firms. But I think what we see now is we have a couple of decades of history again and patterns. And so one of the things that I see happening now is that we are able to name those patterns and we're able to talk in a little bit of generality about common fact patterns and see how they play out.

[00:31:22.090] - Susan Athey

Just as an example, one product might relate to another product in a way that one product helps or hurts customers ability to make choices. It might help or hurt customers ability to be aware about what their options are, what prices are, what their different choices are, for where to purchase. We might see certain products affect the switching costs for customers, for other products, things like that. And so that's different. You're not just looking at two firms that sell the same thing, two products that directly compete with each other, it's one product influencing competition in adjacent markets. But we see patterns and we can start to map out how the principles apply in those fact patterns. I'm feeling much more optimistic about the ability of competition authorities to kind of wrap their heads around what's going on as we have now sort of accumulated evidence about the importance of various factors. What I would say now is yes, it's complicated and no, some of the overly simplified frameworks that maybe they never really applied perfectly, but they really don't apply at all in these more complex industries that has, I think, maybe slowed people down, given people pause and that's what we're seeing now.

[00:33:01.800] - Susan Athey

But it's not that economics couldn't handle it, we just had to be willing to embrace the facts and the market realities. What I'm seeing now is a willingness, nobody's saying, oh, I can't think about that, that's too complicated, that doesn't fit in my I've got two boxes and those are my only two boxes and if it doesn't fit in those boxes, we really can't talk about this. What we're seeing instead is this is really important and we're all going to put the effort in to understand exactly what's happening, why it's happening, and we're not going to stop with a simple theory if it can't explain the facts or the durability of certain firms. So that's really where I see there's challenges, yes, because it's a little bit complicated sometimes you might have to explain not just one product, but multiple products and how they fit together. But on the other hand, we

have accumulated knowledge, accumulated theory, accumulated evidence, accumulated business history to bring to bear.

[00:34:09.710] - Tom Lenard

Aviv, do you want to talk about that?

[00:34:14.690] - Aviv Nevo

I have actually very little to add. I agree with everything that Susan said. Digital markets do tend to be more complex, but I think that's exactly why we need to kind of look at them very carefully to really understand what's going on. I think modern economics has the ability to do so. I think we do have the advantage now of some history, some kind of past. If we're looking at the (inaudible) we might not have as detailed data as we want. A particular event that we're looking at, there is some past that we could look at and can inform our decision. I think that's what we have to do. I don't have much to add beyond that.

[00:35:08.930] - Tom Lenard

We obviously have to give some time to talk about merger policy. The agencies have been working on revising the merger guidelines. From an economic perspective, what are the priorities in terms of revising the merger guidelines? I'd like to hear from both of you.

[00:35:42.130] - Aviv Nevo

I think the goals of any guidelines, whether it's a revision of guidelines or existing guidelines, I think could really be summarized in probably a few principles. So first, you want to be transparent, to both the parties and to the public about how the agencies evaluate mergers. I think that's an important role. And any revisions of the guidelines should be about transparency and clarity, and not just to a narrow kind of group of insiders, inside baseball, insider antitrust, folks who kind of speak the lingo but actually have something that is potentially readable and applicable to kind of a wider audience. So that's one, the other goal that you want is to actually make sure that for staff, you set high level principles that the staff can go to in time, where there's a specific merger in front of them and try to understand how should we deal with market definition, competitive facts, efficiencies? Any of the above. In any particular case, you should be able to go back and say, well, what do the guidelines say?

[00:36:55.270] - Aviv Nevo

Right? And use that kind of as a starting point for a discussion, again, combined with an understanding of the competition and the economics of any particular industry. Finally, I think an important role of the guidelines is to actually provide a reliable reference for courts and for experts, economic experts testifying in courts. We can go in and actually rely on the guidelines to kind of say, look, we're not making the stuff up as we go. Here are guidelines that have set the principles, and we're following those principles. I think

a top priority is to work and achieve these goals. Preserve the parts of the guidelines that have been really helpful in litigation to make sure that we have that, and at the same time update and revise the guidelines where we think they can be improved. If there are times that over the last 13 years or so, we've actually learned that there's places where the guidelines are being misinterpreted and misread, we can actually go and update that. Of course, provide updates on enforcement priorities and approaches that have happened over the last 13 years or so since the 2010 guidelines.

[00:38:19.710] - Susan Athey

Yes. Susan, could you also talk about whether you think merger policy has been too lax in the past?

[00:38:29.090] - Susan Athey

Yes, well, I think there's a few elements. One is that just there's been empirical work that's looked at marginal mergers and a number of studies have found that the claim efficiencies don't seem to pan out and that marginal mergers that just came in around thresholds have generally looked bad when you come back to them. I think there's economic theory that helps you think about just what else can go wrong as markets get more and more concentrated plus accumulated evidence about what's actually happened. I think a lot of that supports stricter interpretations and stricter thresholds. I also just want to agree with everything Aviv said about priorities. Maybe I would connect to my earlier comments back to the guidelines as well. Sometimes as an economist, when you're getting ready, thinking about expert testimony and so on, there can be a little bit of a tension between what you really think is going on and some kind of more simplified boxes that some people think you need to go into. I think there can be a lot of conservatism, especially from the legal side about, you say, this is what's happening. This is the economic theory, this is the evidence, this is how I'd explain it.

[00:40:04.650] - Susan Athey

That sounds complicated, and there's a lot of ways the other side might throw smoke and mirrors at that. I feel like one place that's really important is that the guidelines allow you to tell the truth as an economist. The guidelines allow you to express how competition is playing out under certain fact patterns. A priority for me is to go ahead in a particular case, somebody's saying, well, this is how it should be applied, and someone else is saying, this is how it should be applied, and people are trying to make it confusing. The opportunity you have in the Guidelines is to express in general how the principles apply to commonly encountered fact patterns. A priority here is to just flesh that out a little bit more so that people aren't afraid and that you're not spending all your time trying to argue about the application of the general principles. But in a particular case, you can focus on the facts and the evidence where that's possible. The last versions of the guidelines, especially 2010, they're clear that innovation matters and the theory applies to input markets and so on.

[00:41:24.970] - Susan Athey

People can get confused in just translating from buyers to sellers. Here's a test, and the examples were all about price, are you sure it applies to other things? As economists, of course they do, but really spelling that out and making sure that you don't have to waste your time arguing about something that should be clear is a big priority.

[00:41:55.090] - Tom Lenard

One of the things I think this administration has stressed is issues involving labor markets. So how do you trade off the interests of labor and consumers?

[00:42:10.250] - Susan Athey

Sometimes the Boogeyman is like bad economics, not good economics. Sometimes the Boogeyman is simple economics. But like Econ 101, the simplest textbook models, there isn't a trade off. Allocative efficiency is important in all parts of the value chain. If you exercise monopsony power, that means you have an incentive to use less input than you otherwise would in a more competitive setting. Withholding the purchase of inputs and the simplest models, you use less inputs, you get less output. So less input bad on the labor side, less output, bad on the consumer side, these things are aligned. When we think about longer term effects, if you say like suppress wages of nurses just as an example, that's going to suppress a really important market signal for people to go and train to be nurses. All of that's bad from an economics perspective. Actually, you don't even need the post 1970s economics to tell you that we should be concerned about about market power and input markets for just very classic reasons.

[00:43:35.190] - Tom Lenard

Getting back to the merger policy, and the nascent competition issue, how do you take into account being bought by a bigger firm is obviously a major exit strategy for successful startups? How do you take that into account? How do you write that into new merger guidelines?

[00:44:09.310] - Aviv Nevo

That is definitely sort of a possible effect. One of many I'm not sure that's one that necessarily has to be mentioned in the guidelines, but it's really one that has to look kind of specifically in the context of what's the evidence and what's the case. I realize that you could sort of imagine that having their financial incentives might be driving some innovation this high (inaudible), but there could be a lot of other factors beyond that. I think this is kind of an example where we were talking before about the relative importance of theory and evidence. It would be great to get more evidence. So the question is before we sort of start thinking about writing it into guidelines and looking at things, it would be great if we can actually get more evidence on these sort of effects to see whether they actually exist. I think where you're going with your question, Tom, is to say, if not having that exit strategy, not having the motivation would reduce innovation. I would sort of turn and say, that could be, do we have evidence that that's indeed the case?

[00:45:38.770] - Aviv Nevo

Before starting to think about shaping merger policy around that, maybe we should look at the evidence.

[00:45:48.830] - Susan Athey

I think adding to that, just to back up even outside of guidelines, one important theme is to think about how does competition present itself in an industry? If you were put yourself in the position of incumbents, put yourself in the position of entrance of investors, if you looked at a particular industry and said there's a certain pattern of acquisitions where an incumbent always buys firms with particular characteristics and is able to buy those all when they're small, that would prevent entry from ever occurring. Or this is one of the main paths to entry and competition, then we need to step back and say that's how competition is presenting itself here, and some kind of enforcement is warranted. I think it's just using common sense and economic logic, is a certain pattern of acquisitions going to make sure we don't get competition? You can think of it again if you think of it from the perspective of an incumbent of investors, of entrance, you can often narrow things down a fair bit when you apply economic theory to the problem and then you can look at the history of industries or related industries to understand that. There are a lot of different exit strategies.

[00:47:22.290] - Susan Athey

Just selling to your more established competitor is not the only exit strategy, I think it's not the one that entrepreneurs gets them out of bed in the morning like, I'm going to go take on so and so, and then I'm going to capitulate. If you're investors, you don't want to rule out options later, and you don't want to upset the firms that do a lot of the buying. But at the end of the day, if you tell entrepreneurs and investors that your exit strategy involves a lot of things, but not just capitulating to the biggest firm you're trying to compete with, I still think you get entry, you still get investment.

[00:48:14.170] - Tom Lenard

Well, there is a question. Can either of you say anything about a timeline for the release of the updated merger guidelines?

[00:48:33.010] - Susan Athey

Yeah, as soon as we can.

[00:48:40.230] - Tom Lenard

Let me conclude with a question about just your overall goal for your tenure at the agencies. At the end, how would you judge your tenure of success?

[00:49:05.710] - Susan Athey

So I guess there's, of course, many elements. In the interest of time, let me focus on one or two. One thing that I had heard and I knew, but it was still just amazing to experience when I arrived, was how terrific the staff economists are at both the DOJ and the FTC. I've gotten to know some of the FTC staff as well. Especially if you factor in the relatively low salaries of government, you have people who are at these agencies because they really like having a job that involves going after the truth and doing the very best economics they can. Those groups are some of the biggest and the best in the world. The agencies in the US have the ability to do things in house that a lot of places would get outsourced to consulting firms and so on. I think that building up, as Aviv mentioned earlier, building up the environment and the resources so that that group of people can succeed as best as possible is really important. When I think about now looking forward 20 years, what do we need to be successful for the next 20 years?

[00:50:23.190] - Susan Athey

Well, it always starts with a core of industrial organization, empirical organization, theoretical industrial organization because that's the core of what we do. But we're now encountering firms that themselves have scientists in a variety of areas and that are using business science, and economic science, and operations research and behavioral science, and complex experimental design in very complex ways and in advanced ways in a lot of areas. The firms are on the frontier of research. To understand and fully engage in that, we also need those capabilities. We need to either have access to them through networks of consultants or we need to bring some of that in house. So in terms of expanding our capabilities, we have a principal economist, Ioana Marinescu, who's an expert in labor markets, a monopsony who's come in. We've hired a chief technologist. We have different types of detailees and visitors who have expertise in different industries and different disciplines. Some of the new people we're hiring come from a wider range of disciplines, from finance or other disciplines. One way to look at what my leadership role is, I'm sort of Dean of a business school.

[00:51:50.850] - Speaker 3

Economics is a core foundation of a business school. Often there's also substantial capabilities in operations research and in data science. It's all rebranded, statistics, data science, machine learning, AI, new words, but evolution of the concepts. We need to make sure that everybody's going to be able to address these rich cases that are coming along. Some of that is people and different disciplinary capabilities like behavioral science. Another thing is the technological enablers, just the infrastructure to be able to handle large data sets, to be able to nimbly work with data and so on. It's the data engineering, the support staff. We're really trying to kind of provide that core of IO economists with the surrounding and supporting capabilities and maybe a broader set of disciplinary background or field background within economics. To say, what would success look like, is that we have the ability inside the agency and our networks outside to quickly and expertly tackle the complex cases that are coming along.

[00:53:09.550] - Tom Lenard

Both your agencies are in hiring mode as far as economists are concerned, is that correct?

[00:53:16.140] - Susan Athey

Oh, yeah.

[00:53:17.950] - Aviv Nevo

We're in the midst, actually, of recruiting season. We have quite a few offers out and hoping to hire. So let me just echo, I think, a lot of the exact same thing themes that Susan mentioned. At a high level, if you ask me, how do I value success? If I can say that after I left, I left it just slightly better than it was when I found it or when I joined. I think it really is about going back to building the capabilities of really our incredible staff. Commissioners, Directors at the FTC, we come and go. What really stays is the staff. So if you want to have a long term impact on the agency, it's about creating staff. It's about helping them develop their skills, and it's really about letting them kind of do their work, not just now, but setting them up for doing their work in the future. As I said, doing the work is really doing solid economic work that's based in theoretical foundation in the industry, but then takes account of data, in fact, as it become available. The main issues that we're looking beyond kind of developing the current staff is they have a very wide base in terms of the folks that we hire.

[00:54:45.170] - Aviv Nevo

That's something that I think has already been the tradition at the FTC. I didn't actually appreciate how wide of a range of folks we hire from in terms of kind of empirical, micro, and theoretical. We hire applied theorists. We hire not just IO economists and empirical other economists, but folks that are trained as labor economists, health economists, environmental, and many others, in large part because besides the antitrust, we also have the consumer protection side. We really do hire from a very wide range of economists. Two other issues that we need to deal with, and again, these are things that Susan mentioned, on the technology side. We just announced that we have a new office for technology, and we have a new Chief Technology Officer who sits outside of BE, but we're working very closely with her. We've had meetings and discussions of kind of exactly how to work productively together for exactly the same type of things that Susan talked about. Somewhat related to that, a big challenge that we're thinking about and trying to figure out how to handle is kind of the challenge of what used to be called big data.

[00:56:05.540] - Aviv Nevo

It might go by other names today. Big data, it's not just that we're getting massive amounts of data. What used to be counting gigabytes now is terabytes, and not just single digit terabytes. Some of our investigations were getting massive amounts that we just have to figure out how to even just load up to our system. How do we work with data that's not organized in a very traditional kind of way, of rows and columns, but actually has a lot of information that's very different. If you look to the private sector, that's been handled mostly, as far as I can tell, by having economists work together with data scientists. That's something that we're thinking about, as well as, how do we have the capability to both study industries

and understand the role of economics and competition in them. That requires looking kind of at a broader set of skills, but also having the empirical ability to look at data from these industries. It sounds like the DOJ and us are heading in exactly the same direction and trying to meet the challenges of the future.

[00:57:17.210] - Tom Lenard

We have reached the end of our time. I really want to thank you again for doing this.