

FTC Roundtable: The Effects of Occupational Licensure on Competition, Consumers, and the Workforce: Empirical Research and Results

November 7, 2017

Transcript

TARA KOSLOV: Good afternoon, everyone. I'm Tara Koslov. I'm Acting Director of the FTC's Office of Policy Planning. I'm delighted to welcome you to the Economic Liberty Task Force's second public roundtable-- The Effects of Occupational Licensure on Competition, Consumers, and the Workforce-- Empirical Research and Results.

As many of you know, we've had an exciting and productive eight months since Acting Chairman Ohlhausen convened the task force earlier this year and asked OPP to run the project. We embrace this opportunity for several reasons. First, we knew it would give us an excellent platform to extend and deepen the commission's long-standing, bipartisan work on occupational licensing issues.

Second, we hoped to promote a national dialogue on occupational licensing reform and how it can reduce barriers to entry, enhance competition, and promote economic opportunity. The task force has been taking full advantage of the commission's policy and advocacy tools to achieve these goals. We held our first roundtable back in July, which focused on occupational license portability across state lines.

We also continue to collaborate closely with many stakeholders. And we filed several advocacy comments on issues relating to occupational regulation. Today's roundtable is an important next step. To the greatest extent possible, the FTC grounds its competition policy and advocacy efforts in the real-world experience of consumers, workers, and society as a whole. That means we stay on top of empirical research as it evolves.

Today we will hear from researchers who are steeped in this kind of work as it relates to both the benefits and costs of occupational licensing. And together we will identify additional questions that might warrant further study. A public comment period remains open. And we especially welcome comments pointing to other empirical work in this area.

On behalf of the task force, thanks to those of you joining us today in person and also via our live webcast. We extend special thanks to our terrific roster of speakers for taking the time to travel here and share their expertise with us. And I personally want to thank Dan Gilman, Tim Deyak, Derek Moore, Bill Adkinson and Dave Schmidt, my fantastic colleagues who organized this whole event and make me look really good in the process. Because I had to do so little. And especially Dan and Tim, who will be moderating today's discussion.

Before we begin our substantive program, it's my job to quickly review some administrative and safety details. Please silence any mobile phones and any electronic devices. If you must use them during the roundtable, please be respectful of the speakers and your fellow audience members. Please be aware that if you leave the Constitution Center Building for any reason during the roundtable, you will have to go back through security screening again.

Visitors all received a lanyard with a plastic FTC event security badge. We do reuse those for multiple events. So when you leave for the day, please do return your badge to event staff. Restrooms are located in the hallway just outside the conference room. There are big signs outside them. A couple of us will be live tweeting during the event. We'll be at the handle @FTC and we're tweeting at the hashtag #EconLibertyFTC which others can use as well.

Wi-Fi is available and the access code should have been on a little brochure that was available at the registration table. Please be advised that this event may be photographed, webcast, or recorded. By participating in this event, you are agreeing that your image and anything you say or submit may be posted indefinitely at FTC.gov or on one of the commission's publicly available social media sites.

As I mentioned, the roundtable is being live webcast with huge thanks to our amazing tech team back there who make that happen. The webcast will be recorded. A transcript will also be generated and these materials will be made available on the FTC website within the next few weeks. The speaker presentations will be posted on the roundtable website along with public comments received today.

If you wish to submit a public comment after the roundtable, you may do so at the link provided on the roundtable website. Our intent is to create a lasting resource for everyone interested in these important issues. Our moderators do intend to leave some time at the end for audience questions. I suspect it will be difficult to get to all of them. But the task force certainly will review all of them.

We will also accept questions via Twitter at the hashtag #EconLibertyFTC. We will also accept questions via comment cards for those who are here in person. Roundtable staff will walk around to distribute and collect the cards and bring them up to the moderators. If you need anything while you're here, please feel free to ask FTC staff who are wearing the official roundtable badges, including our great paralegal helpers out at the registration desk.

And that is it for the housekeeping details. I now have the great pleasure to introduce our first speaker, my longtime colleague and friend, FTC Acting Chairman Maureen Ohlhausen. She was sworn in as an FCC Commissioner in April 2012 and was designated to serve as Acting FCC Chairman by President Trump this past January. Among Maureen's many accomplishments, I'm proud we get to claim her as an OPP alumna.

She previously served as OPP Director. And I know she shares my view that events like this one are an excellent opportunity for the FTC to promote research scholarship discussion and informed policy making on issues of importance to American consumers. So please join me in welcoming Acting Chairman Ohlhausen.

MAUREEN OHLHAUSEN: Well, thank you. There we go, right in my face. Thank you, Tara, for that kind introduction. And as Tara mentioned, I created this task force earlier this year to look at how changes in licensing laws can reduce barriers to entry and enhance competition and promote economic opportunity. And today's roundtable, The Effects of Occupational Licensure

on Competition, Consumers and the Workforce-- Empirical Research and Results, focuses on the current state of empirical knowledge regarding the effects of occupational licensure.

As Tara mentioned, we held an earlier workshop in June of this year on Streamlining Licensing Across State Lines-- Initiatives to Enhance Occupational Licensure Portability. And all the materials relating to that event are on our web site, including the webcast. I also want to thank our panelists participating in today's roundtable.

These leading academics in this field will share their research as well as their assessments of how is the state of our knowledge regarding the effects of licensing. And they'll also share suggestions for further research. And finally, let me share my appreciation to the FTC staff serving on the Economic Liberty Task Force. They work very hard, not only to organize today's roundtable, but also to implement an aggressive agenda of stakeholder outreach events and related research projects, with more to come.

So as Tara mentioned, when I was named Acting Chairman in January, I quickly launched the Economic Liberty Task Force. It's one of my signature initiatives with a particular focus on occupational licensure reform. Few things are more fundamental to a citizen's well-being than the ability to work. Now the FTC recognizes that licensing sometimes serves important consumer protection functions and addresses certain types of market failure, especially in situations where consumers may be vulnerable. Because they lack sufficient information to evaluate the quality of service providers.

A classic example is in health care, where the state has a strong interest in preventing unqualified people from providing certain health care services that pose risks to patients' safety and where consumers may find it difficult to evaluate whether a provider is qualified or not. At the same time, however, licensing can drive up prices, reduce supply, and restrict consumer access and choice. And it can also impose barriers to entry for qualified workers, preventing individuals from moving up the economic ladder or getting through that door that we use as our logo for the Economic Liberty Task Force.

So it's thus important to ask whether all of these licensing restrictions are necessary to protect public health and safety. Are the benefits sufficient to justify the cost to workers and consumers? Or should we be encouraging states to explore alternative approaches? So looking beyond my health care example and other highly skilled professions, the current reality is that state licensing requirements cover a wide variety of occupations and an increasing portion of the workforce.

And you've probably already heard some of the figures we've cited. So today, nearly 30% of jobs in the US require a license, up from less than 5% in the 1950s. So for me, that triggers an important observation. For many of these occupations, especially some that are only licensed in a few states-- and we see quite a variety of whether a certain occupation requires a license in a particular state-- we need to ask whether the benefits of licensing justify the burdens and costs, especially when alternatives are available.

So in launching the Economic Liberty Task Force, my goal was to shine the light on these licensing issues and use the FTC's broad range of policy and advocacy tools. Now when I say

that, I don't mean to downplay the influence of our enforcement mission. Much of our work takes the form of enforcement actions directed at stopping a wide range of anti-competitive conduct.

For example, in the North Carolina State Board of Dental Examiners versus the FTC, we successfully challenged rules requiring that service, such as teeth whitening, be performed only by dentists. And this was imposed by a board that was controlled by dentists without active supervision by the state. And in an older South Carolina State Board of Dentistry case, we successfully challenged, and we settled this one, a board regulation that reduced access to basic dental care for poor people.

But when it comes to combating anti-competitive licensing requirements, much more of our work involves our policy tools, not our enforcement ones. And in particular, we have a substantial competition advocacy program. And much of our advocacy is directed toward proposed state licensing laws or regulations. And we frequently receive requests from state legislators regarding proposed legislation affecting licensing requirements.

And the FTC staff provides guidance wherever possible. And we also keep an eye out for advocacy opportunities that can help alleviate unnecessary licensing burdens. So for example, I think it was last week, FTC staff submitted an advocacy comment to the Department of Veterans Affairs, commenting on a rule that would ensure that VA telehealth practitioners may provide services to non-federal sites, such as a veterans home, regardless of whether the practitioner is licensed in the state where the patient is located. And I think the benefits of that are quite obvious.

And now that brings me to our other important policy tool, research and study. While research may not always have an immediate or obvious impact, it's critical to our competition mission. Because it allows us to continually strengthen and deepen our understanding of the underlying issues that guide our enforcement and advocacy efforts. In particular, as the task force recognized early on, we are most effective when we are able to bolster our recommendations with credible information about the effects of licensing restrictions, taking advantage of the best available scholarship and data.

Today's roundtable is not only an excellent example of the FTC's own research and study methods, but will also highlight and synthesize studies by others. Our roundtable will feature a discussion of the current state of empirical research on the effects of state licensing requirements. And indeed, the FTC and its staff have, themselves, offered and authored a number of economic and policy studies examining specific restrictions imposed by states in a variety of professions. And, as we will find out today, this literature continues to grow.

Our panelists will discuss policies that might better balance the legitimate goals of licensing with the benefits of free entry by service providers. And the questions include, what is the state of empirical knowledge about the extent, growth, and stringency of state licensing requirements? What is the state of empirical evidence on the costs and benefits of occupational licensing? What are the alternatives to occupational licensing? And what is the best available evidence upon

which policymakers might rely in deciding whether to adopt a new licensing regime or whether to reform or eliminate an existing licensing regime?

Now I hope and expect that this roundtable will help us to better understand the effects of occupational licensing rules, the types of occupations they cover, the costs they impose, the extent to which they serve legitimate goals, and the ability of alternative mechanisms to serve these goals. And armed with this knowledge, the FTC and its staff will be even better situated to promote sensible licensing regulations, ones that, to the greatest extent possible, remove roadblocks to market entry, empower individual initiative and enterprise, enable innovation, and ensure that competition determines the range of choices available to consumers in the marketplace.

So thank you, very much for your attention and for joining us today. And I'll now turn the program over to our two co-moderators, Dan Gilman from the Office of Policy Planning, and Tim Deyak of the Bureau of Economics. And their detailed bios are available in the program information. Thank you.

DAN GILMAN: Hi, well, thanks very much to Acting Chairman Ohlhausen and to Tara Koslov for kicking things off. I'm Dan Gilman from the Office of Policy Planning. And I want, just very briefly, too briefly, to introduce my colleague, Tim Deyak, from our Bureau of Economics and our panelists and presenter for the discussion to follow. We have extensive biographies of our very, very accomplished participants. So I'll simply introduce people by name, title, and affiliation. And I'll refer you to their bios for more.

First, as I said, Tim Deyak, to my left from the Bureau of Economics. Both for a panel discussion and for a framing presentation, we're fortunate to have Morris Kleiner, who's Professor of Public Affairs at the Humphrey School of Public Affairs at the University of Minnesota. Tom Koch, from our very own Bureau of Economics who continues in the great FTC tradition of being, not just a consumer of empirical research on occupational regulation, but a producer of such research.

Beth Redbird, who is Assistant Professor of Sociology at North Western University. Edward Timmons, Associate Professor of Economics and the Director of the Center for the Study of Occupational Regulations at Saint Francis University. Jules van Binsbergin, the Nippon Life Associate Professor of Finance at the Wharton School at the University of Pennsylvania. And Abigail Wozniak, Associate Professor in the Department of Economics at the University of Notre Dame. So we'll proceed in a moment to our-- not a moment, in about 15 minutes or so, to our panel discussion. But first, we're very fortunate to have Professor Morris Kleiner here for some opening framing remarks.

MORRIS KLEINER: Well, thank you, Dan. I appreciate the opportunity to be here. And I don't know how many of you are economists, but at least socially adept economists tend to be people, when they're introduced to you, will look at your shoes and not their own when they're speaking to you. So that's sort of the level of social interaction of many of the economists.

But hopefully, it will be more interesting, in terms of some of the things that we're going to be talking about. And I am very fortunate to at least be able to give you an overview of occupational licensing from a law and economics perspective. And it's great to be here at the FTC, where much of the empirical work was started on occupational licensing and flourished during the 1970s and '80s.

And when I was at the Brookings Institution and the Department of Labor, we just always were in awe of the kind of work that was done on a wide variety of issues, in terms of quality of services that might be provided under occupational licensing that was being done at the FTC. Well, why should anyone be concerned with this issue? When I was first assigned this task, when I was on leave at Brookings and was assigned to the Department of Labor, my boss asked me to do this work on occupational licensing, since I was a relatively new person at the Department of Labor.

And I said, what had I done to him to deserve this very dry task? And so I thought it was just looking at statutes. But I found it to be very fascinating. And part of that was sort of the growth of occupational licensing. As the slide notes, this is data from the President's report. And it has been growing in the US economy, largely because of the movement from manufacturing, where unions tended to dominate, to a service-based economy, where there are a very different set of rules and occupations and their representatives tend to dominate.

So now, about 25% or so, depending on which survey you're looking at, plus over about 800 occupations are licensed in at least one state. So when you include individuals who are both licensed, certified, or registered by governments, and that includes city or state governments or the federal government, that raises the number of individuals who are covered by licensing to over 1,100 different occupations.

But on the other hand, only about 65 occupations are licensed across all states. And how can you think of this potpourri of different types of licensing across different states from the federal government, to state government, to local governments? And one can look at this from the perspective of what the Institute for Justice mentioned as being an inverted pyramid. And what gives regulation, when do you get the greatest benefits relative to the costs? And that tends to be how economists tend to view this.

Initially, one can sort of think of this as being the market. And market regulates. If individuals aren't providing sufficient services, they can go elsewhere. There's also litigation, where there's litigation for deceptive trade practices. If someone isn't providing you what you thought you were going to get, you can sue them. There are inspections. For example, going to a restaurant where you may have had lunch today, that restaurant was likely inspected. And that provides consumers with some degree of certainty with respect to the service or product they're buying.

Bonding, where if you're renting the services of a tree trimmer, you know that that tree trimmer may have been bonded or is covered by insurance. And that gives the consumer some degree of certainty with respect to what recourse consumers may have with respect to a particular service that's being provided. With respect to the government, there is often registration, a list of individuals. You may think of this as sort of an Angie's List, a number of service providers that

might be provided by the government. If individuals don't provide those services, they're taken off.

Certification, which is a right to title. Only individuals who are chartered financial analysts, for example, can use that title. Others cannot. And finally, at the bottom, and the most restrictive, is licensing. And that's the right to practice. Only those individuals who have met certain requirements are allowed by law to provide those services for pay. If other individuals provide those services, they can be fined or arrested.

Now what are some of the benefits? And what have commentators had to say about the importance of licensing? Former Supreme Court Justice Samuel Jackson, who also had a very distinguished career as a prosecutor, prosecuted in the trials at Nuremberg and was portrayed by Spencer Tracy in *Judgment at Nuremberg*. But also, he was a very distinguished judge and wrote one of the major opinions on occupational licensing, noting that there is an important reason the state may have an interest in shielding the public against the untrustworthy, the incompetent, or the irresponsible, that providing some sort of background for what the state has to say or do with respect to occupational licensing. And that suggests there are very clear benefits.

On the other hand, there are costs. And perhaps the individual who brought this to the greatest public attention was former University of Chicago Economist and Nobel Laureate Milton Friedman. His 1962 book, *Capitalism and Freedom*, noted at that time, which was about 10% of the workforce was licensed, "the puzzle is not that we have so many silly licensure laws, but why don't we have far more?"

And what he was suggesting was that this may be the perfect storm. That is, few can have substantial gains as a consequence of occupational licensing, but there may be many who lose just a little, in terms of paying a bit more for those services. So this was sort of the political economy. Individuals or occupations have incentives and can provide and go to the legislature and the governor. And as a result, a lot more individuals might be licensed.

He was very leery of that and noted that there is a great argument for the market, which permits the consumers, not producers, to decide what may serve customers the best. Now, in terms of occupational licensing as a public policy, it is perhaps not surprising that licensing is stealth regulation. It gets much less attention than, for example, what might happen to other labor market or product market institutions, So for example, unions or the minimum wage.

And licensing covers more individuals than either unions or the minimum wage combined. Yet in terms of public discourse, it gets dramatically less attention. Now what effect does licensing have? So certainly one can think of the theory, benefits, and costs. And one can come up with very reasoned arguments for licensing having lots of benefits to individuals or perhaps significant costs.

In the labor market, which I tend to focus most of my attention, there are very dramatic and different wage effects, depending on the occupation. So licensing can have overall perhaps about a 10% wage effect. But this varies a great deal. Some occupations, such as dentistry, licensing

seems to have significantly greater effects than for other occupations, where all one needs to do is sign up to be considered in a licensed occupation.

So for some occupations, the effects are very minimal. Other occupations, especially those which have significant barriers to entry, the effects tend to be fairly dramatic and stark. Now what effect does licensing have in aggregate? And there are a number of ways of looking at this. One is the aggregate effects across the economy. And they can range from as great as 15% plus, to no effect, depending on whether one is looking at whether an occupation is covered, that is, there is a statute that covers the particular occupation.

So for example, engineers are covered by a licensing statute in all states. But less than a third of all engineers have obtained a license. On the other hand, doctors are covered in all states. And virtually all doctors have obtained a license. And this was brought to my attention by my co-author, Mark Klee, who's here today, in terms of the difference between coverage and attainment. Licensing has its biggest effect on attainment.

So as additional studies are coming through, the effects tend to be somewhat diminished. But certainly, the effects are around 10% plus, in terms of its effects. Now, what happens over time? So licensing, unlike the minimum wage or, for example, unemployment insurance, when there are changes in the laws and these laws are implemented, you can measure these effects almost immediately.

Employers, when a minimum wage goes into effect, must raise their wages. When unemployment insurance statutes change, employers or the government must raise the unemployment insurance or the length of time that an individual is covered. Licensing has a much different duration effect. So this is data from before a particular statute was implemented to after. So it's really a before and after.

And the comparison group are wages of unlicensed workers. And you can see that before licensing goes into effect, wage changes are very similar. But after licensing goes into effect, the slope of the line tends to be much steeper for occupations that are licensed, relative to their unregulated counterparts. So licensing, unlike many other public policies or the implementation of new laws, takes a much longer time. And there are individuals who are grandfathered into an occupation. That is, they are in the occupation. The occupation becomes licensed. They then are able to continue practicing, because that tends to be the quid pro quo for an occupation becoming licensed.

There also tends to be a great deal of variation across states. Some states have very high levels of occupational licensing. For example, Iowa, which is heavily dominated by the insurance industry, and Nevada, which is heavily dominated by gaming. On the other hand, South Carolina has about a third the percentage of its workforce licensed relative to the highest licensed state, which is Iowa.

And in part, that may be due to South Carolina having a much heavier base of manufacturing and much less in terms of having occupations that are more service oriented and as a result tend to be more heavily regulated. If you look at the European Union, you find the same sort of thing. That

is, nations like Germany having about three times the level of licensing of countries like Denmark.

Also, what effect does licensing have on other labor market characteristics? So as licensing has gone up, which is the blue line. And you will also see that one thing that has happened is a decline in interstate migration. Are they correlated? And some work that we have shown and work that was done by the Council of Economic Advisors suggests that occupational licensing may be a contributor to the decline of labor market efficiency. That is the ability of individuals to move to where the jobs are because of these different regulations that tend to vary on a state-by-state basis.

And some of our work suggests that about 4% of the decline of interstate migration is due to occupational licensing, where the effect of the growing or the aging of the population contributes about 10% of that decline. Now, work that has been done by the Council of Economic Advisors and is represented on the panel here, is that licensed occupations tend to move less across states, relative to what they're moving within states.

So the 0 is what people move who are not licensed. And the blue line is the movement, or the blue bar, are individuals who are moving across states. And they move much less than other individuals who are the comparison group. But they tend to move pretty close to what everyone else does within a state.

So the barriers tend to be across states where there are different requirements for occupational licensing. And some of my work also suggests that this may be a major impediment for people being able to move to where the jobs are. And as a result, it reduces labor market efficiency. And economists often call it labor market churning.

Now what effect does all this have? What are the outcomes? And that's largely what the Federal Trade Commission is most concerned with. And again, from the White House report, is that price effects tend to be virtually all positive. When you take other factors into account, across a wide variety of services, from health care, to finance, to other areas, the effect of occupational licensing is to raise the prices that consumers tend to pay.

While that might be a good trade-off if quality is higher. You're paying more. And you're getting a much higher quality service. But unfortunately, there hasn't been much effect. The influence on quality, sure, there is some effect. That is, mid-wives at the earliest part of the 20th century showed a positive effect on reducing infant mortality.

But the preponderance of the effects across a wide variety of service industries, from health care, to education, to work done on the internet, in terms of Yelp, shows very small effects. And some of my work that I'm currently doing on Uber shows very small effects of city licensing of ride sharing on the quality that consumers receive or as some correlates of safety.

So in general, although there are some benefits to occupational licensing in terms of quality, the overall effects tend to be relatively small in comparison to the price effects or the wage effects. So this is sort of an overview of what might be the costs and some of the benefits that I hope the

panel will take up across a wide variety of different services from finance, to barbering services, to the work that was done earlier in the White House report.

So this is sort of an overview, a quick overview of some of the benefits and costs and some of the current empirical work that has been done. And we can talk about some of the directions for future work as part of the panel. So thank you, very much for your attention on this issue.

DANIEL GILMAN: Thanks very much to Professor Kleiner. So I just wanted to remind people that if you have questions, there are comment cards, question cards. We promise to read them all. We'll try to ask some of them. But staff will certainly read them all and take them into account in time. We want to devote most of our time to discussion. But we want to give our panelists at least a few minutes to say something, five to seven minutes. You can see the clock is going there. And so let me just proceed to Professor Wozniak.

ABIGAIL WOZNIAK: Should I stay here? Or should I go up?

DANIEL GILMAN: It's entirely up to you. If you want to go up to the lectern, you can. We have a--

ABIGAIL WOZNIAK: Well, there were barriers to entry in slide use. And I was deterred.

DANIEL GILMAN: OK.

ABIGAIL WOZNIAK: Morris.

MORRIS KLEINER: Oh, thank you.

ABIGAIL WOZNIAK: Yeah, I'm used to being able to prepare my slides at the last minute for undergraduate instruction. And seeing as my job here today is really just to give you an overview of the process that created that White House report that Morris alluded to, I thought that was something I could pretty readily do verbally. So I'm going to kind of walk you through that process and then hopefully take more questions in the question period.

So I was part of the White House Council of Economic Advisers during the Obama administration. I came on board in 2014. And I was part of the team. It really was a team, a very big team effort to develop the White House report. The title of which is Occupational Licensing-- A Framework for Policy Makers, which we released in July of 2015. And you can still find that on the internet. That's very available.

So the team was comprised primarily of researchers and staff at US treasury, at the Council of Economic Advisers, and also at the National Economic Council. Although, we had, as you'll see, input from a number of agencies, FTC included. And I would say that interest in this topic of potentially reforming or considering reforms to occupational licensing was something that members of these different offices and agencies were already interested in when I came on board.

So this is something where conversations had been happening in and around the White House prior to my joining the team. And I would say it really kind of proceeded separately, independently. Offices were kind of doing their own investigations in what I would say was kind of phase one of this project, a very academic style. Let's look at the research that exists. Let's maybe try to figure out what data are out there that we could use, really proceeding in a very investigative fashion around this general topic.

And at that point, when it became clear that a large number of us were really interested in this, we formed a wider team. But I would say at that point, we still didn't have a really clear idea of what would come out of this process. So I would say, perhaps a bit in contrast to some of the other processes that I was involved with during my time in the White House, this was one where we had really a very open book as to what might come out of this, what might we produce, what kind of positions might we take.

There was not a strong agenda, I would say, for action, at least, when we began this project. We really just wanted to know what is out there, what are the avenues for successful policy intervention in this area. That was kind of phase one. And I would say really the second phase was when these agencies came together and offices. We really formed a bigger team.

And we moved to having conversations with a broad set of stakeholders. So these stakeholders, many of whom are referenced in the report, but many more of whom were on large numbers of meetings and conference calls and some are not necessarily represented by name, but many people generously shared a lot of time to contribute their perspective on this issue.

In particular, we heard from state legislators who were interested in this issue. We heard from representatives of professional associations, advocacy group members, researchers in academia and in the public sector, relevant federal staff, members of state regulatory boards, and members of the team that worked on crafting language around easing the transition of military members and military spouses across state lines and into licensed occupations.

So that hopefully gives you a picture of really a broad set of listening events and efforts that we went through as a larger team. I would say it was out of that second phase that the need for this report became very apparent, particularly, talking to state legislators who wanted to try to take action. Because they saw something happening on the ground in their states that didn't make a lot of sense to them. But they didn't have a way to put together a package that might say, this is why we should think more about proceeding with the regulation that is being proposed. Or this is why we should think about easing up on the regulation that exists right here.

There wasn't a lot of language for them to engage in a bigger way. And this was where we really felt that economic theory had something to offer these public servants. Economic theory, as Morris outlined, is very clear that the beneficiaries from this type of regulation are often very focused and the costs are very decentralized. So there's not a good representative for the cost side of these types of rules and regulations.

And so we felt that a first focus of this report could really be to present this theory in a way that was accessible, in a way that it was something that public sector individuals could use to have

these kinds of conversations. Then ultimately, after, I would say, further conversations and review, we felt we could go a bit of a step further, which was to make some recommendations around best practices. The full set of these best practices can be found in the report. But let me just highlight a couple of them.

I think these will be familiar to a lot of folks who have been engaged in these kinds of discussions. But I think they're worth throwing out here as part of this roundtable event. First and foremost, a key recommendation is to ensure that any licensing restrictions are closely targeted to protecting public health, safety, and welfare. That should be the motivating dimension on which we're thinking about licensing. And then verify that the licensing requirements that are put in place are actually directly related to providing these protections.

The second recommendation is to consider allowing licensed professionals to provide services to the full extent of their competency i.e. to have a broad scope of practice, rather than a narrow scope of practice. And we recommended this even in cases where this would lead to multiple professions providing overlapping services. And I think that's been seen here again with a number of the FTC's efforts on that front, as well. A number of conversations with regulatory agencies at the state level gave us a lot of anecdotal evidence for this third recommendation, which is that firm sunrise provisions might be more effective than regular sunset reviews, although both can certainly be extremely helpful.

And finally, considering alternate forms of credentialing, like certification and registration, as Morris pointed out. Again, there are a number of other recommendations that we compile in the report. I would say finally, a subtext running through the report is just really not a best practice, but a deep need, and that is for consistent data across occupations and states regarding the licensing prevalence and requirements that they have. And I think we're going to hear more about that from some of our other panelists.

But that's certainly a challenge to understanding what's going on the ground. It's a challenge for states understanding where they're situated in the landscape of these requirements. And it's a challenge to researchers trying to understand in which cases we've maybe exceeded regulation for the public welfare and in which cases we might be falling short.

We really just need to have that information on what the regulations are in a coherent way that we can match across states and across occupations. So I think if you read the report, you will see many examples where we have that kind of information. But it will also be clear that that's a special set. And there certainly are many other things that we could learn from. So hopefully, we'll be able to talk a bit more about research that's gone on in the last two years since the report came out, in the question and answer session.

DANIEL GILMAN: Thank you. Professor Timmons?

EDWARD TIMMONS: I'd like to thank the organizers of today's event and to thank the Federal Trade Commission for all the fine work that's been done on understanding the effects of occupational licensing. And I can't think of a better lead-off man than Morris on this topic. And thank you, Abby, for the fine work that you did on the report for the President on this topic.

What I'm going to do is I'm going to talk a little bit about the work that we've been doing at our center, the [INAUDIBLE] Center for the Study of Occupational Regulation and some ongoing projects specifically focused on occupational regulation. So with respect to the work, we have a website csorsfu.com which I'll be talking a little bit about shortly.

I'm also very interested in documenting the removal of occupational licensing laws and understanding the effects. There's been a dearth of situations where these laws have been removed, as I'll touch upon. With respect to health care, we're very interested in the area of non-physician scope of practice, thinking about the tasks that non-physicians are allowed to perform, as according to occupational licensing laws.

And then finally, an early study, a pilot study taking a look at the link between licensing and economic mobility, opening doors for individuals. So this is a snapshot of our web site. How many folks know what a perfusionist is? All right, very good. We have a very educated crowd here, for sure. Perfusionists are the individuals that operate a heart and lung machine when a doctor has a patient under the knife and they have to stop an individual's heart.

And there's a wide array of licensing regulations associated with perfusionists. I have a snapshot here of Pennsylvania. But the bottom line is there's a wide variety of regulations, a wide variety of requirements, with respect to occupational licensing. And one major shortcoming with respect to research is understanding what these differences are.

So the project that we're doing at Saint Francis university is we're trying to document what these licensing requirements look like. We're starting with a snapshot. We hope to eventually have a panel. We'll likely be piggybacking off of some fine work that Morris Kleiner is doing, that the Institute for Justice is doing, that I understand that Professor Redbird is doing.

So we hope that this will be a repository that those that are interested in this topic can come to and navigate and better understand what the differences in these laws are. Another area of interest for me and at the center is taking a look at the effects of the removal of licensing. I did a paper for the Bureau of Labor Statistics a couple of years ago. And what we found is that the removal of occupational licensing is quite rare.

We were only able to uncover eight instances over the last 40 years where an occupational license was fully removed. One of those happened to be the case of barbers in Alabama. And I have a project that we're working on taking a look at the effects of the removal of this licensing law. And what we find is that when licensing laws are removed, the wages of professionals do, in fact, fall, just the opposite of what occurs when licensing laws are first enacted.

I also have a project that I'm working on with the Mercatus Center at George Mason University taking a look at the removal of hair braider licensing in Virginia. And again, we're finding results that are very consistent with theory. I'm also very interested just in tracking the effects and the preponderance of the licensing. And we've seen states adopt new legislation, for instance, Arizona, Tennessee, and Mississippi.

And we might see more states, my home state of Pennsylvania just announced that they're going to do a review of occupational licensing laws. So with respect to non-physician scope of practice, and I know this is an issue that the Federal Trade Commission has looked at, this is an issue that Morris has looked at, taking a look at nurse practitioner scope of practice and autonomy.

This is a map of the United States. You can see the green areas. Those are states where nurse practitioners are effectively able to freely work and practice to the full extent of their training. Whereas, in the yellow and red states, there are some restrictions. In my home state of Pennsylvania, nurse practitioners have to enter into a collaborative practice agreements with physicians. In Maryland and the District of Columbia, not so. They are free to practice to the full extent of their training.

With respect to physical therapists, one important issue is the direct access, whether or not physical therapists can see patients without physician referral. Again, in Pennsylvania, there's restrictions on physical therapist direct access. They're only permitted to see a patient for 30 days before they have to ultimately refer the patient to a physician. In Maryland, not so. DC, as it turns out, is very similar to Pennsylvania.

Finally, I want to talk a little bit about licensing and economic mobility. We're thinking about how licensing laws may be restricting doors, may be restricting economic opportunity to individuals. What we did in the study that's available from the Archbridge Institute, it just came out last week, we are taking a look at building off of the landmark work of the Institute for Justice and documenting licensing requirements for low and moderate income individuals.

We go back 30 years and we take a look at growth in occupations that require licensing in the states. And I should point out that in Oklahoma, there were only 15 newly licensed occupations from 1993 to 2012. Whereas, in Louisiana, there were 59 new licensed occupations over that same time.

So this graph just represents a simple correlation. Of course, correlation does not imply causality. And it's something that needs to be looked at more rigorously. But we do find some evidence that growth in occupational licensing, increases in the number of low and moderate income occupations that require licensing, does in fact result or is correlated with a reduction in economic mobility. Thank you, very much for your attention.

DANIEL GILMAN: I think it's Doctor Koch. Tom?

THOMAS KOCH: OK, great. So I'll start off the sitting portion of the event. So I want to kind of encourage us to think about this in terms of what we're trying to measure and think about here. So I'll go with the anecdote, for a couple of reasons, of getting a flu shot. So first of all, I'll go with the anecdote because it is flu shot season. And I'll be doing good for everyone if I encourage everyone to get a flu shot after this event.

The other reason I would encourage us to use this example is, where one might get the flu shot is actually an aspect of occupational licensing. So right now, we have some research going on looking at the effect of states relaxing who can and cannot give the flu shots. So for example, in

terms of efficiency, while I am a doctor, I would discourage you getting the flu shot from me. That said, there are legitimate reasons that there might be other professionals who are not doctors that that should be allowed, to give the flu shot.

So what we look at, in this instance, is trying to understand how allowing pharmacists or other allied providers giving flu shots affects a variety of outcomes. So the first order thing you might think of is, well, does it affect the number of people who get the flu shot? Which again, it is valuable because it is a preventative thing, which again, we should all get. And if you haven't yet, right after the session.

The other thing to think about is, does it decrease the incidents of who gets sick and perhaps, as importantly, how sick they get? So not only do people go to the doctor less during flu season, but is there a decrease in the intensity of that sickness? Are people less likely to be admitted to the hospital for the flu versus just going to the doctor for the flu?

So those, I think, are first order questions that we should try to focus on in doing research along these lines. Kind of like an antitrust, very often, I try to think about this in the context of consumer welfare. And that being the first order thing that we care about, sometimes we can talk about allocational questions. So if I do find out that allowing pharmacists to give the flu shot makes it more likely I get the flu shot at a CVS instead of, say, my primary care physician, should I, per se, care about that? Right? That is maybe less obvious given the focus on the consumer, if there aren't other things that are affecting the consumer along those lines, right?

So if we think that a licensure law for nurse practitioners is going to decrease the wages that physicians are paid, is that, per se, evidence that I should care about, that licensure law? It might decrease the Gini coefficient, which some people argue is enough to validate that policy measure. But in terms of improving health care outcomes for patients and our citizenry, that's not necessarily as obvious.

That said, I would say sometimes allocational decisions are actually positive ones as well, as we'll hear from Professor Redbird in a moment. There are sometimes reasons to believe that changing licensing rules and regulations may well have an effect in terms of who provides the care, which itself may be a per se issue that we care about.

So for example, when I voted this morning, I voted in Fairfax County. My ballot came out with English, Spanish, Vietnamese, and, I believe, Korean languages, so that people who read those languages natively would be able to use it. If you operate a hospital in my neighborhood, it's very likely you're going to need people who speak at least those languages to provide good care to your community.

In so far as those language barriers are affected and turned into opportunities of care barriers because of licensure or a lack of licensure, that might be something that we care about and might have actual consequences for the ability of health care providers to do their best jobs. So with that warm up, I guess I'll pass it back to my right, your left of the table, to pass it back.

DANIEL GILMAN: Oh, thanks, thanks. Next, Professor Redbird.

BETH REDBIRD: Afternoon. Afternoon to people who are watching in their bathrobes on the internet. Those of us trapped in the rain are very jealous of you. So I want to approach this a bit from the concept of what's good for workers, right? And so once upon a time, we talked about all these amazing effects that unions had for workers, the effects on wages, the effects on occupations. And when unions started to go away, we saw this kind of corresponding increase in licensing. And we thought that was bad, because licensing can't possibly be as good for workers as unions were. So let's ask that question.

And I do that by looking at the growth in licensing laws in the last 40 years. Now for those viewer interested in 1970, there were approximately 2,000 licensing laws nationwide. Today there are nearly twice that number. They cross, according to my measure, 340 occupations, nearly 1,700 new licensing laws in all 50 states in 40 years. So let's ask, what is the effect of every single one of these nearly 2000 licensing laws? And I do that with a very simple comparison.

Let's look at somebody who's licensed and the corresponding unlicensed worker. Same occupation, different jurisdiction. But let's be more specific than that. Let's ask, for example, a white male dentist who's licensed, and compare him to a white male dentist who's unlicensed in a different jurisdiction. Or ultimately, since we have so many new licensing laws, let's ask about biologists or psychologists or paralegals or 340 different occupations. And let's see what this direct comparison produces.

The answer seems to be, on average, a wage increase of about 0.1%, or about \$380 annually, or nothing, right? And this poses an interesting intellectual puzzle. Because, of course, the theory on how wages are produced through licensing is really sound. So where does this kind of paradox come from? So we can also, with this number of laws, follow what happens in a single state after the enactment of licensing. So I can say at 0.0, when a law is enacted, what happens to wages for the workers in that specific occupation? And the answer seems to be, again, nothing.

And this, I think, is a good explanation for perhaps why. Let me tell you a tale of two paralegals. We have a paralegal in Ohio where occupations aren't licensed. And how does this paralegal get this job? How does she become a paralegal? Well, in all likelihood, maybe she went to school, maybe she got a degree in sociology.

We have to congratulate her for her good taste there, right? And she goes and she answers, I don't know, a job ad? Do people still put out job ads? I don't know the answer to that. And she sits across from an attorney and she attempts to convince that attorney that she will make a good paralegal. Maybe she can say, sociology completely prepared me for being a paralegal. That's an answer we get a lot, right?

She maybe knew an attorney before she decided to become a paralegal. Maybe her parents were an attorney, maybe a friend of a family. But this is how she chooses to enter this occupation. And she has very little option on that. Now compare that to a paralegal in the state of California.

She decides she wants to be a paralegal. So she goes to the state's web site, and she looks up how to become a paralegal. And there are a list of tasks that she can do to become a paralegal. It

involves going to a paralegal school for a certain number of hours. And so she goes to paralegal school. Yes, she pays money. Yes, she invests time. And in that, she gains an education.

But she also gains all the various things that go along with schooling, including an alumni network, placement assistance, et cetera, right? Then she goes to the state and she takes the paralegal licensing exam, which lasts for two days in the state of California. And at the end of that, she passes. And she has a certificate that says she is qualified to be a paralegal.

And with that certificate, she can sit across from that attorney and say, look, I have done my education as a paralegal. And the state has said I'm qualified to be a paralegal. And that shifts the way she enters this occupation substantially. And the evidence for that is what happens after a licensing law is passed. The number of people who work in that occupation actually increases. The supply of labor into an occupation after the passage of a licensing law, increases the number of people who work in that occupation.

Now, I'm going to skip the question of quality because of time constraints. And because it's scary. But it's important to note, these results vary across occupation, jurisdiction, and time, which means the occupations we focus on, the case studies that we use, change the way we understand this wage effect. Lastly, I want to show you this, because this is really interesting. After the passage of licensing laws, the proportion of women who work in an occupation increases, so does the proportion of people who are non-white.

So it's not simply a question of increase in supply, it's an increase in a very specific type of supply. Perhaps the kind of supply that had trouble entering that occupation to begin with, traditionally disadvantaged workers. So what we see is, after the enactment of licensing, we help workers who might have had informal barriers to entry enter an occupation. And this is the key, I think, big assumption that we've been making about licensing for a long time. In an unregulated environment, entry into an occupation is not barrier free.

There are informational barriers, social network barriers, cultural barriers, even discriminatory barriers. In an unregulated environment, work still has barriers. But in a regulated environment, we've taken those barriers and we've removed them and replaced them with something more formal, something delineated, codified, and perhaps more colorblind, something more meritocratic. And so it's important, when we think about licensing, not to think about it from the standpoint of implementation of new barriers and instead, to ask how we shift previous barriers to the new scheme.

And what this means is the effect of licensing on wages and workers will differ depending on what was there previously, what the licensing law does, and how it replaced it. The last point I think you might all be interested in, where does licensing appear? So this is really preliminary research, but these nearly 2,000 new licensing laws, unsurprisingly, appear less likely in Republican controlled legislatures. They are more likely in places where we already have vocational training that resembles what the licensing will implement. So in other words, institutions that are already in place to help support licensing lead to the rise of licensing.

And then, perhaps most relevant to this panel, we also see they seem to be appearing in occupations that are about customer well-being, hazardous materials, occupations where the risk that errors create significant harm is high, or dangerous conditions. So there does appear to be some evidence that we're enacting licensing laws in places where we're worried about protection and well-being of consumers. Thank you.

DANIEL GILMAN: Thank you. Last, certainly not least, Professor van Binsbergen.

JULES VAN BINSBERGEN: There is a slide, I think, or there should be.

DANIEL GILMAN: Did that? Is it not going forward?

JULES VAN BINSBERGEN: Sorry, Do we have any wisdom from our IT people or perhaps you people? I can already-- Maybe we can figure it out along the way. Let me just start.

DANIEL GILMAN: Yes, certainly. I'm sorry, sorry this was--

JULES VAN BINSBERGEN: No, that's no problem. All right, so what I want to talk about with you is a paper that I wrote together with Jonathan Berk who unfortunately couldn't be here. And it's very much a research paper inspired by some recent research on what we would call charlatans in the financial sector. And of course, since the financial crisis, the discussion of, is this sector more or less prone to charlatans, yes or no, and what consequences should that have.

And one thing that we really noticed was that there was a very strong response to the fact that there were 7% of people amongst financial advisors that were convicted of some sort of violation of ethics. And there was this big outcry-- oh, wonderful, thank you-- where people said, we need to do something about this. We need to get regulation in place. We need to reduce this number.

And what was very clear from the discussion that immediately followed, that was taken as given, that if we could somehow reduce that fraction, that automatically consumers would be better off if we would do that. And that was true amongst regulators. It was true amongst many of the financial economist that we talked to, that there was this idea that if you could somehow reduce the number of charlatans in a particular profession that automatically consumers would be better off.

Then, the first thing that we wanted to do then was, why don't we just start collecting data and find out, between professions, how often does it happen that people get convicted of being between quotation marks a "charlatan?" What are the consequences of that happening to you, as a professional? Are you fired from your firm? Are you rehired after that? Is that a normal thing to happen? Or are you essentially out of the profession for a very long time? Is this different between financial advisers versus lawyers versus doctors versus you name it?

And one thing that I think also was very nicely illustrated today, but in many presentations that we've seen is that one thing that certainly is true without any debate amongst all of us here, I think, is that there's a huge cross-sectional variation in everything. There is huge cross-sectional

variation in conviction rates. There is huge cross-sectional variations in the number of licensing laws between states. There is huge variation over time in the number of licensing that we have.

Everything seems to be varying a lot. And we wanted to understand, where does this variation actually come from? And are there ways for us to better understand that cross-sectional variation? Is it driven by inherent characteristics of the profession? , Obviously between two state lines, if people who live on just two sides of two neighboring states, of course, the inherent nature of the profession couldn't be very different. So what is it, then, that is so different between these two?

And that really, then, also motivated us to come up with a framework, the theory framework, where we said, let's just introduce a market where we have skilled professionals. These skilled professionals need to some extent be in short supply, meaning that, and I think that also speaks to some of the results that we just saw before this presentation, what is very important is the question of, is there an easy extra supply of laborers that can come into this profession in a relatively short period of time?

Or is it really the case that the wage elasticity of supply is actually pretty low, and therefore we shouldn't expect too many extra workers to enter, and therefore, excluding some workers may be very costly. And that elasticity is important. And so in the end, what we did was we came up with a decision graph over here. But before I go into this graph, this decision tree, there's one other thing that I want to raise, which some people may have already said, but something that we really noticed, which is the question, how comfortable are we that these licensing exams are actually testing what we want to be tested?

If it's the case that very skilled professionals, surgeons, or lawyers, or others that have been doing the profession for 20 years could not pass the board exams without heavily studying for them again, so is it then true that the skills that you actually use by performing, they're the most skilled professionals that we have, what are we then testing on these exams exactly? Are these really skills that we're testing that could really help us prevent charlatans from entering? Or are we just putting up something that's difficult and that just prevents entry "period" but it isn't correlated at all with the skills that we want to have tested for this particular profession?

And I think that's another place where I think empirical research could really go deeper and ask the question, what do these particular exams actually look like? I can tell you, when it comes to financial advisers and the Series exams, some of my finance colleagues have, for the fun of it, tried to take the Series exams without studying for them. And most of us have miserably failed by doing that.

Now why is that? Well, because the Series exams really have a lot of facts that you need to learn by heart. You go to the exam, you quickly write up those facts, and within a month after you've written down those facts, you've already forgotten 3/4 of them. So what have we really tested? And is this, then, really relevant skill that we're talking about?

Now, the next thing that we then did was we wrote up a simple framework, an economic framework, where we simply asked the question, under what circumstances would you want to

license? Under what circumstances would you want to certify? And so I think, also, in Beth's presentation just now, clearly there could be some benefits also in terms of the access that you set in respect to licensing. But, of course, if we had certification, we could also overcome a lot of those things in a similar way. So we still need to have the debate of, what do we want to license or what do we want to certify.

Let me just make it exact, what I mean, with those two things. Certification just means information provision. Meaning some people are certified, others are not. But not being certified doesn't prevent you from entering. Licensing really means if you don't pass the exam, you essentially are not allowed to practice. And therefore, you're definitely excluded from the labor force if you don't pass the license.

So the decision tree looks as follows, as you can see here on the screen. The first thing that we all need to agree on and what we noticed in the discussion was, that there isn't a particularly big agreement on it, is what is it that we want to maximize? Are we regulating in the interest of the consumers and therefore, we want to make consumers better off? Or do we want to make, what most economists would say total welfare is supposed to be about, the sum of producer and consumer surplus?

And then, of course, we still need to have the debate on if we have the total pie and we want to maximize that, how we split up that pie, either through taxation or other redistributive methods between producers and consumers. And maybe we could try to fix that afterwards. But first, do we want to maximize consumer surplus or consumer plus producer surplus?

Now I think most of the licensing discussion is on consumer surplus, particularly, here. Now that's not true for all countries. There are countries on the other side of the ocean that explicitly say that regulation is about total surplus. It's not just about consumer surplus. So the first debate that I think we need to have is, are we about consumer surplus or are we about total surplus? And what do we want to maximize?

Now let's just presume that we want to proceed with consumer surplus. Then the question is, is it the case that the information asymmetry about the professionals really prevents the market from existing at all, the usual market for lemons problem, where the whole market breaks down because we have such a large information asymmetry. Now if that's the case, then yes, certainly, we may want to provide some information to get the market started. But we want to then provide the minimal amount of information to get the market started.

Let's be clear, all of the licensing trends that we've just seen on the board, those professions already existed. Those markets were already functioning. We're introducing licensing requirements into existing markets. So if you then look at the decision graph, on the consumer surplus side of things, we're not under the "yes." But we're under the "no."

If we're under the "no" category, then the next question is, what is the wage elasticity of skilled labor? Meaning, if we reduce the number of people that are not really providing the service, that, of course, reduces the supply, and therefore increases wages. What we show is that generally hurts consumer surplus. But if, at least, the higher wages are then an incentive for skilled

professionals, in the longer run, to start entering the market, and therefore, the supply of skilled professionals could go up, we may end up with the yellow square that you see there. In that case, certification could really be the right policy to try to get skilled labor to enter the market.

If the wage elasticity of skilled labor supply is just very low and we won't get any entry, then actually our paper shows that under very general conditions, you don't want to license and you don't want to certify. Because both of these actions will just reduce competition in the market. It will therefore increase prices and will therefore make consumers worse off. Of course, it could be that total surplus is better, but consumers are worse off.

So that's the left side. If we want to talk about total surplus and we're more interested in consumer plus producer surplus, then certification actually could make sense in a more general setting, regardless of what the wage elasticity is. But, of course, then we still need to think about how we distribute between the producer and the consumer surplus.

Now finally, there is one other thing that I quickly wanted to talk to you about, which is, it is very hard to measure the overall welfare implications, meaning outside of the industry. If we exclude certain workers, do we really have a good idea of what those workers otherwise would have done and what value they could have added had they not been in this particular market? And of course, that counter-factual use of their skill set is an incredibly hard thing to measure. And therefore, adding that up really complicates that discussion. That's what I wanted to say. Thank you.

DANIEL GILMAN: Terrific. Thank you.

TIMOTHY DEYAK: OK, I am on. OK. We've heard a couple of people say that this is going to be a discussion about the empirical results in occupational licensing. But as all economists know, all empirical analysis is preceded by some consideration of theory. And so I want to start with some questions about theory. And we've heard some people mention certain things that are relevant here.

In the literature and certainly in the earlier literature, there appear to be two general models that underlie the reasons for the existence of licensure that would be resolving some sort of informational market failure or rent seeking or a combination of those. The question I have is, are there alternative theories that-- well, I guess, first of all, are those theories sufficient for the task at hand, if what we're trying to do is to figure out whether licensing is a good idea or not? And then if they're not, are there other theories that should be considered? And I'll toss that out to anybody.

ABIGAIL WOZNAK: I'll jump in and say, I wouldn't put this as an alternative theory, but I think when we think about the resolving market failure kind of theory of licensing, we're thinking about transmitting information to consumers and allowing a market to take place because consumers now have reliable information with which to take action and make choices.

This is not a formalized theory. But I think it's interesting that if you were to do a plot that's similar to the one that Morris showed with declining interstate migration, over the same period,

we've had, to the extent that we can measure it, also declines in recent decades in employer provided training. And Professor Redbird has brought up the decline in unionization.

So to some extent there might be some market failures from an employer's perspective in terms of getting skilled and trained workers that, potentially, licensing is somehow a response to. This is something we don't know a lot about. Pretty much anything that I would have to say, I think, in this part of the roundtable would be things that we don't know a lot about. But I thought that's an interesting question, as to how the rise of licensing might pair with employer needs for skilled workers, but just less prevalence of employer provided training.

TIMOTHY DEYAK: Is there some way of incorporating that into a standard political choice model or something? For both the rent seeking and for the resolving the informational issues, we can anticipate who the actors might be and why they might do it.

ABIGAIL WOZNAK: I think that's harder. I mean, that's why I kind of call it a variant of a theory about a market failure. In this case, the consumers are employers. And so I'm not going to generate a theory on the fly for that. But I think it's an alternative form of the market failure problem that I haven't seen discussed a lot that certainly matches some recent trends. And it's probably worth some consideration as an explanation.

MORRIS KLEINER: One thing, and thank you for the great comments and great presentations, one thing that one might want to look at is, is it licensing or nothing at all? And the continuum, you can have various forms of regulation that provide much of the same benefits of having individuals be trained, the sort of thing that Abby mentioned, but not have the draconian effects of, if you don't get permission from the government to do a specific task, then you're fined or potentially go to jail. So do you need that sort of 0, 1? Or can you have a continuum of potential government interventions in the market which are not as draconian as licensing?

EDWARD TIMMONS: Just to piggyback off of Morris's point, when we're thinking about what the goal of occupational licensing is, we're trying to protect the public from harm from unqualified professionals.

JULES VAN BINSBERGEN: It's consumer surplus only.

EDWARD TIMMONS: When I'm thinking about what the arguments are, I think that's what tends to be the argument that's advanced by professionals. And I think that when we start to think about using occupational licensing as a platform for increasing the training, I just think that there's better ways to go about doing that. Morris mentioned certification.

There's other methodology, as there is other platforms that can be used if that's the objective. If we're truly interested, though, in protecting the public from harm, if we're interested in increasing consumer surpluses, as Jules mentioned, which I believe is what the goal of licensing should be, then I don't think looking at these other aspects of licensing is in line with that goal.

BETH REDBIRD: I don't know how to work the microphone. I'm unlicensed there. I think it's important for us to note that these theories perhaps oversimplify a more complicated interaction.

And of course, a theories job is to be parsimonious. But the diametrically opposed question of consumers and producers is not quite that simple anymore, right? We have consumers. On the producer side, we're talking about both workers and sometimes the businesses that hire them.

Now, certainly some practitioners are self-employed, but not all of them. And then we also have this more complicated interactional problem that Jules, I think, very rightly, brings up, which is when a state chooses to license an occupation, it shifts the way that occupation works. And it does so in a complex market of a whole series of other occupations. And so the counterfactual question of shifting one license impacts a whole labor force in complex, interactional ways.

So the decision to, for example, increase service occupational licensing changes sales occupations. It changes manufacturing occupations. And it changes it for consumers, the workers who work in those occupations, and the people who hire those workers. And so both the information asymmetry theories and the rent seeking theories tend to view only two diametrically opposed groups, who is the beneficial beneficiary of that work and who produces that work.

And in reality we're talking about more groups with more complicated interactions than those two theories really allow for. And so I would call upon us to reconsider this and say now is the time for us to expand this and make this more in line with the kind of state level economies we see in today's labor force, as opposed to the labor force of say the 1950s.

JULES VAN BINSBERGEN: But the way the producer surplus is split between the firm and the workers, I think, is also definitely an interesting one that needs to go in there. And we need to have those considerations, too. But the first thing I would like to see is that we start thinking about producer surplus at all. Usually when we think about welfare, we think about the total, not just consumers.

And so there's the incentive for the central planner in most economic models, which often is called the regulator, who wants to maximize the total size of the pie. And then we can talk about the distribution of the pie afterwards. What we're doing in this whole discussion is really focusing just on consumers. And maximizing consumer surplus may not be in the best interest of everybody. Now if on top of that the owners of the firms are, in fact, the same consumers that we're trying to protect, which in a diversified stock market is more and more the case, then it becomes even more complex who we're really benefiting by protecting the consumer versus the total.

DANIEL GILMAN: OK, Can I jump in with a request, not a regulation. So this is about an information cost, more than an information asymmetry. We're all arrayed like this. It's hard for us to see who wants to talk. If our panelists could maybe just signal an interest in discussion by tilting your name card up, then the beknighted public servants at the end can call on you via your sign.

MORRIS KLEINER: I'll follow the rules here. OK, one thing that we probably need to take into account in a theory, something that Robert Sollow who is a economist says, is technological change. And now there's information. One can look at Uber or Lyft or other ride sharing models

where you have information about the producer. You have information about the consumer. You have on-time information about the quality of the ride. You have online information about hard stopping and hard starting.

And a lot of this really reduces the need for a lot of the government regulation. And you see this form of regulation, which 20 years ago was highly regulated, moving into very much a deregulatory mode. And one of the things, in terms of addressing the composition, is in cities like New York, which is highly regulated, you find very few women. Go across the border to New Jersey, and you see a dramatic, many times as many women serving as Uber drivers.

The same thing happened in Houston, where the state deregulated ride sharing. And there were very few women in the regulated taxi market. And now there's many times more women providing these types of services. So one thing we might want to take into account to try to address your question of how does theory work, I think technological change should be incorporated into any these types of theories.

DANIEL GILMAN: Can I ask a question that some people have touched on already, but maybe pull it into two parts? And it's sort of a high level question. But it's a question of what's the central motivation, interest, or target here. And I think I'd like to hear what, people have talked about this, but the central motivation for your research, for the research program.

And then maybe there's also a component for policy. What's the main interest? Maybe these things are different. But people have talked about it already. Is it consumer welfare, total social welfare? Is it something else, some other policy goal? Maybe just a step back would be interesting. And I'll just turn it over to the whole panel if anyone wants to jump in. We've got the card mechanism.

MORRIS KLEINER: Well, maybe I shouldn't jump in. But I sort of look at this in terms of three issues. One is access, can individuals access this labor market? Can they provide? Do these regulations-- given, especially, in my case where I looked at occupations where there are significant barriers to entry. And out of the 300 or so, where in some cases there are relatively few barriers to entry, but if you're looking at teaching or dentistry or occupational physical therapy where there are significant barriers to entry, what effect do those barriers have on the ability of low income minorities and others to access the ability to go into the middle class?

What effect does it have on prices? What do consumers have to pay as a result of licensed workers generally? And that's sort of the preponderance. Although certainly there are exceptions. In certain occupations there are no effects of the licensing. But certainly, the preponderance suggests there is. What effect does that have on consumers? So do you have someone who's working on the wait staff who's unregulated, they're having to pay more to go to an occupational and physical therapist, because they're licensed.

So is that a redistribution, a reverse Robin Hood, of low income waitstaff paying more to get a service that's licensed? And do these services provide higher quality? Certainly, at point of sale, you're probably going to get higher quality. But it also needs to take into account because prices are higher, because access is lower, what happens to individuals who can't get these services?

So are they going to their brother-in-law to go through occupational therapy? Or are they going to a family member because they can't afford these types of services? So these are other factors that need to be taken into account. So it's access, prices, and quality that I think really need both empirical and policy thought, in terms of the effects of licensing.

JULES VAN BINSBERGEN: And so to add to that, I think in terms of measurement, what I think is the most important thing we should try to measure is the wage elasticity of skill supply.

BETH REDBIRD: The what?

JULES VAN BINSBERGEN: The wage elasticity of skill supply. So how responsive for different professions is a higher wage for the long term entry. And so when there's a very long training period involved, then of course, it's clear that even if, now, wages are higher and therefore there's more incentive for skilled people to go into that profession, before we will start seeing those effects, it might take 10 years before trained doctors would then enter that particular profession.

There are other professions where if wages become higher today, maybe six months later or 12 months later we could see a substantial spike in skilled laborers going to that particular profession. But at least getting a sense of what professions there is that wage elasticity and for which ones there's not. I think in the framework I just presented, it provides a very important part of the consideration.

DANIEL GILMAN: Thanks. Professor Redbird.

BETH REDBIRD: Yeah, I think Jules raised a really good point in that, occupations are not all created equal. And they're not even the same today as they were 10, 15, 20 years ago. And they're not the same across state lines, either. And so this is a complex question that involves the interaction of lots of different moving pieces, even just on the consumer welfare side, right? Consumer welfare is an interaction of quality and price. It's an interaction of availability of service and location of service.

And so looking at each occupation and the characteristics of that occupation, I think, become really important. So what you see in my work is, unfortunately, I look across all census derived occupations. And we attempted to create an entire census of every licensing law passed in the United States since 1970. It's a huge, broad picture, right? And I think that's important work to do.

But I also think it's really important to say, if you narrow in on that focus, what do you see that matters for when these aspects shift? When do consumers receive higher prices? When do they receive better quality service? When is it that workers enter the occupation more easily or when is it harder? And it's more complicated than simply a question of professional versus nonprofessional, too.

We see, yeah, we see occupations, or licensed physical therapists. You also see licensed bartenders. We see licensed waiters. We see licensed cab drivers. But we also see those

professions unlicensed, too. We see them across different industries, whether it's gaming industries, whether it's service industries. It's a complex question. And while some of the work you've seen here is very broad. There's, I think, a need for very narrow research to say under what circumstances do these trends occur and under what circumstances do they not occur.

THOMAS KOCH: To narrow it down, per Professor Redbird's request, I've got to go back to the health care setting. So just anecdotally, it's my experience that nurse practitioners and physician's assistants prescribe medicines differently than doctors do. So if you have your regular seasonal cold and you need Codeine cough syrup to sleep through the night, again my anecdotal experience is that NPs will prescribe that differentially than MDs.

And so what we started to look at is first, cross-sectionally, do NPs and MDs, allied professionals and medical doctors, prescribe different kinds of medicines differentially, whether it's intense pain medication, or even generics versus non-generics? But also, how might the introduction of these laws change the mixture of allied professionals and medical doctor professionals? And how might that have consequences for the way that the drugs are prescribed, more broadly, within the state? So I think there is room to do some of that research in a very narrow way. And we're starting to make progress on that.

TIMOTHY DEYAK: Well, let me let me change the focus a little bit. I don't think we're going to come to an agreement here about this. One of the things that I think we do all agree on is that there has been a huge expansion in occupational licensing. With regard to the theories that are available, what explains that?

EDWARD TIMMONS: Well, I think the theory that Morris had from Milton Friedman, this idea that the costs of occupational licensing are disperse. So for the individual consumer, we may not necessarily be fully aware of what the costs of occupational licensing are. But with respect to the benefits, those do tend to be concentrated in the hands of a few. So as Milton Friedman's quote pointed out, the question is, why don't we have more silly licensure laws?

And in thinking about who is ultimately advancing these laws, we don't generally have individuals that are representing the community. We don't have individuals that are representing consumers that are pushing for licensing laws. But instead we see professional agencies. And we see those that have direct economic ties to occupational licensing laws being advanced. Those are the loudest voices in the room with respect to initiating these new laws.

TIMOTHY DEYAK: Professor Redbird?

JULES VAN BINSBERGEN: So I think one, oh, sorry, either way.

BETH REDBIRD: Flagged first.

JULES VAN BINSBERGEN: OK. So I think that, empirically, my guess would be that we're going to find that the producer interests and the strength of the lobbying group will be a major explanation of that cross-sectional variation, particularly across states that we see, and over time. But I do think that good empirical research should try to establish which fraction of that cross-

sectional variation that we're seeing and the increases that we're seeing is due to that versus potentially other reasons. And separating those two, I think, is a first order empirical research question that needs to be figured out. And my opinion that producer interests play some role in it, is definitely true. Whether that's the vast majority of the variation, that remains to be seen.

TIMOTHY DEYAK: Can I ask a clarifying question? For both of you, the idea that this was rent-seeking or dominated by rent-seeking is first order. That seems to apply to certain situations where you do have political organizations that can carry this out. But it doesn't seem to fit with a lot of the extension of licensure in areas such as hair braiders and other people who don't seem to have that kind of political clout.

EDWARD TIMMONS: Well, I mean, I'd argue that with respect to hair braiders, you have a vested interest. You have cosmetologists that are potentially concerned about additional competition from hair braiders. So it's the same rent-seeking story. It's just in this case you have cosmetologists that are trying to keep out hair braiders from the profession, and potentially expanding the scope, the definition of what constitutes cosmetology, and putting hair braiding under that umbrella.

JULES VAN BINSBERGEN: I'm just going to say two sentences and then back to you. So certainly, the increase in licensing, that large increase, we can also see a huge increase in payments made for lobbying, over time. I think, of course, these are just two time trends that are both going up. And they could both be due to many other reasons. But certainly it's possible that, let's say it this way, I think lobbying has become a profitable activity, maybe even more so than it used to be. And that, in general, is an issue that needs to be addressed. But in this context, it may also have to be.

TIMOTHY DEYAK: Professor Redbird.

BETH REDBIRD: Yeah, So I'm in the middle of this research, again, with 1,700 new licensing laws. And we're looking at when it arises, what are the characteristics of the occupation. Because we can think of, of course, the consumer protectionist aspect. Are we licensing things where we're concerned where consumers could get hurt? Are we licensing occupations that we think that there are big issues surrounding consumer information? We also have lobbying data. So we'll ask to what extent professional associations lobby.

And that either, a, effectively creates a license for that lobbying organization, or, b, can lobby to keep a competitive licensing scheme from enacting. So the hair braider cosmetologist argument could be cosmetologists are lobbying to get hair breeders licensed because it expands their ability to engage in those kinds of practices. Or ultimately, they're lobbying to keep hair braiders from licensing as an exclusionary mechanism. But we're also curious as to what extent states care about the way their industries are structured.

So we might think, for example, in Hawaii, there's a huge number of tourist style occupations licensed, like shark boat operators. In Arizona, rainmakers are licensed. And so to what extent state is saying we want to create stability in this labor force and so we'll license that. And then there's a worker power aspect to it, too. The classic rent-seeking of a group of people who have

resources and wish to monopolize and maintain those resources. So I guess the moral of the story is, we're looking across all these different explanations and stay tuned, we'll know soon.

ABIGAIL WOZNIAK: Yeah, so I certainly agree with the comments that the political economy of rent-seeking is likely a powerful part of the story. And I agree that it's worth trying to do some kind of decomposition and figure out how big a role it's actually playing. But I think considering the role of other market participants and the demand that other entities might have for licensed workers versus other types of credentialing is an important question. So for example, in the conversations that we carried out as part of the White House report, we heard from a number of state agencies that sometimes insurers would require that a health professional of whatever variety be licensed in order to receive reimbursement.

So it didn't really matter so much what exact service they were providing. But they were not going to reimburse if the person providing the service wasn't licensed. As part of a number of educational reform packages, calls have been made to have teachers be licensed and alternatively credentialed in various ways. And I would argue that at least some of that is coming from parents and policymakers, and not entirely from other advocates for teachers.

So thinking about why policymakers or consumers or insurers or any other market participant is asking for a license versus some alternative form of credential, I think, is a really important question. And it's really important for potentially taking up some of these recommendations to use tools other than licensing. A license is something that everybody understands. Complexity is certainly, I would say, a problem in the marketplace. And there's probably a tendency for people to revert to something that's familiar. A license makes sense to people. How can we make other things make sense and make those be transparent?

TIMOTHY DEYAK: Morris?

MORRIS KLEINER: I just want to commend Abby. And some of the work and some of the spillover-- since this section is called empirical research and results. And one of the outcomes of that report was that there was a lot more data for many researchers, both in and out of government, to get information on the attainment of a license. So it's not just the coverage. As I mentioned earlier, only a third or less of all engineers have obtained a license. About half of all accountants have obtained a license. So this is important work and a co-author in the audience, Mark Klee, really brought this out to me.

The other is the ability of occupations to limit supply. And in the Netherlands, there was a great experiment done by doctors. So the ability of people to control entry in the Netherlands, individuals who got into medical school are randomly assigned. And the people who were able, they had already passed a test and then they were randomly assigned about who could get in and who couldn't get into medical school.

And after about 30 years, they have this great longitudinal data. The people that were able to get into medical school were making almost 50% more than the people who weren't. So the ability to restrict supply, at least in that case, for that occupation, resulted in some dramatic benefits to individuals. And even though wages and benefits and pensions and the ability to find jobs, which

all are much better for licensed occupations, are much better, it was just very hard because of the barriers to entry to enter these occupations.

JULES VAN BINSBERGEN: So one thing to add, also, in terms of the policy communication and what makes it, politically, so hard, I think, that also comes back to Abigail's comment, which is, why are consumers themselves or parents or others asking for these licensing requirements? Where does that come from? And my impression is that it has a lot to do with what, as economist, we would call, thinking in equilibrium models.

Meaning, if I can get better service because people are higher qualified, and in my head I just keep the price of the service the same, and I then ask you for \$100, would you rather be helped by somebody who was great or by somebody who could also be not so great? Yeah, of course, if the price is the same, I'm obviously going to say, yes, I want to have the licensed person. But if I now say, yeah, but you can either get the service for \$100 or you can get the service for \$200, it's now worth it to do the licensing. And it becomes explicit that it becomes much more expensive.

And then suddenly the choice is not so obvious anymore. And I think that what we, for example, saw, Tom Cotton and Elizabeth Warren wrote this letter to FINRA after these financial advisers who were caught, to have done these ethical convictions and stuff. You really saw that the assumption was, can we just take the rotten apples out and keep the rest of the equilibrium exactly the same?

So the prices stay the same. Everything stays the same. Nothing changes. All we fixed is just taking the rotten apples out of the system. But unfortunately, that's just not how it works. The whole equilibrium will change as soon as we take it out. And communicating that is just too often so hard. Maybe that is one of the inhibitors for getting these licensing requirements to be decreased.

TIMOTHY DEYAK: Tom?

THOMAS KOCH: Yeah, I think also it would be important to think about what we can and cannot promise in terms of what we think the consequences of regulation or deregulation would allow. So last week I spent a week in Bismarck, North Dakota as part of a trial litigation for a case that the FTC brought in. So that's why I'm not in a suit. My suit was all worn out and is all North Dakota'd out for everyone, unfortunately.

So in our complaint, we alleged that the market, the proper anti-trust market, was adult primary care providers. Which one might reasonably assume that we don't necessarily think that nurse practitioners would lower the price of adult primary care if we expanded the scope of practice there. And as we saw on the slides earlier, it is the case that North Dakota has some of the most broad scope of practice laws for providers not under the direct supervision of MD doctors.

So if we think about the consequences of expanding scope of practice, we may not believe really that there will be a decrease in the price for a physician's services, especially adult primary care services. And in fact, it might lead to an increase in medical spending, as people have improved

access to care. The story that you would hear in North Dakota is we need these NPs to be out in these other areas that can't attract a full-time doctor.

And you go to a policymaker and you say look, we do this, we're going to lower medical spending. In fact, by this story that I've just been told, you might increase medical spending. Now we may well think that's efficient, useful medical spending. But it's important to calibrate our promises to what we might reasonably expect to be able to achieve.

DANIEL GILMAN: Can I offer a very cheap bit of information, maybe a nudge. No one's obligated to forward questions. We do have these cards and my very sharp and nimble colleague, Derek Moore, can collect them if you have questions. So it's just an opportunity. Do we want to move on to the next question or?

TIMOTHY DEYAK: Yeah, let me ask, in the current environment, and indeed probably the existence of this panel here today, there is some thinking that at least some amount of licensure is unnecessary and harmful, judged by some standards. We may not come to agreement on that standard. But something has gone awry. What is it that we would have-- what do we have to know if somebody comes in and says, we would like to establish this licensure arrangement, what would we have to know to know whether we, the FTC, could say an opinion, this is not a good idea as opposed to, yes, this is a good idea?

ABIGAIL WOZNIAK: Well, I'm jump in. Because this was one of the things we wanted to really lay out, at least, some starter steps with the White House report. I'd say the first thing, it's this kind of claim that we're in agreement that some amount of the licensing that exists is not optimal. I'd say I think that prima facie evidence for that is just the real heterogeneity in what is licensed across states and how it is licensed. It cannot be that one state is getting-- I mean, maybe one state is getting it right. But many states are not because of the great diversity in whether something is even licensed at all and the hours of certification that it requires.

And we're grateful for the work that a number of teams, including Doctor Timmons', are doing, to really try to quantify that. Because that remains an area of need from every investigation that's taken place, that's clear. But we still don't have the comprehensive picture. So I think that's a piece of evidence that really a lot of folks can agree on. We just cannot have an optimal situation with that much heterogeneity in it. That said, where to start if someone is proposing a new regulation? I'll reiterate that the report outlines a number of steps.

I guess I would say, it seems that a clear first step is that this particular profession has to have a tight association with consumer health, safety, or welfare. And without being able to make that tight link, that's difficult. I'll just throw out there, because I know others will have lots of ideas, I'll throw out there what I think is challenging about that though. And I'll come back to the case, for example, of licensing in education.

You could make a case to me that the person who mops the classroom in my kids' daycare facility is really critical to their health and safety. You could make that case to me. Especially when we're dealing with children or health of the elderly, we run into, I think, the same things that pose challenges for our health care spending, which is that we run into things where we're

willing to spend a lot of money to ensure that we're getting a small amount of benefit out of them. And so that, I think, becomes the real challenge. It's often easy to make that case that this is linked to health or welfare. And where are we doing to draw the line that?

MORRIS KLEINER: I think in a general theoretical way, you'd look at the benefits and costs and look at alternatives relative to licensing. But there is some specifics, and again an outgrowth of the White House report, is that there is now an 11 state consortium that's looking at exactly these issues. That was really funded through an outgrowth of the White House report and funding that was provided by the federal government that's being headed by the National Council of State legislatures, council of state governments, and the National Governors Association fortunate enough to provide some advice to this group.

And those are exactly the questions. And the overarching questions that I'm suggesting is, what are the benefits in costs? And how do you quantify those? And are there alternatives to licensing less draconian or less rigorous forms of regulation that might serve the same purposes?

DANIEL GILMAN: I wonder if I could follow up with another version of the "what we're looking at" question. And maybe it's something I've heard come up in a number of the comments. It's maybe about a dialogue between the data and the theory and maybe, in some sense, metatheory. Because it's a question about taxonomy. And I'll confess that I'm not licensed as a physician or as a metaphysician. But we've heard about the occupation changing. What's the occupation? Who's competing with whom? In competition a lot of times, I mean we could look, you could think about competition in the labor market.

But a lot of times we'll be looking at competition in the provision of goods or certain services very often. And so I'm wondering, there's all this variation in state regulation. We have some data sets. What's the fit or lack of fit between, first of all, these regulatory categories? My home state, commonwealth of Virginia, says, dentist is x, an X-ray technician is y, big data sets, maybe Bureau of Labor Statistics' catalogue of occupations, right? And they look at all sorts of things to determine what's an occupation. So there's one question. How do these things fit together?

And then, of course, we've heard about the occupation changing with licensure. And we've heard about different people providing maybe identical, or very hard to distinguish, very close substitutes, less close substitutes. We might wonder about price effect supply access, all sorts of things from the perspective of the services produced, associated goods. That's sort of another column. How well do these three columns mesh or fail to mesh? Is that is that a significant issue? I see Professor Redbird has a sign up.

BETH REDBIRD: Yeah, you ask a really interesting question. And I think part of the problem we have understanding the effect of various types of regulation comes from this question. So for example, it appears as though there's actually a lot of similarity in types of licensing for a specific occupation across jurisdictions. And that might very well be because lawyers need a law degree. And that's just what we think they need.

It might be because the license codifies what already tends to exist in the labor market. So if we tend to think, oh, a massage therapist should have some education, then when the license comes

about, people look around and say, well, that make sense. Let's codify that. It might very well be that states are borrowing model legislation from one another.

And so with licensing, it appears as though-- especially because they tend to be broad. And they tend to delineate both titles. You are called a physical therapist, if you are licensed as a physical therapist. You are called an occupational therapist, if you are licensed as an occupational therapist. And if anybody in this audience who's not a physical therapist knows the difference between these two things, that's a fascinating thing that you know. Because the title tends to come with the license. And also because the tasks tend to come with the license. And the license might be codifying what we already see in the labor market or alternately, shaping the labor market.

Licenses tend to be broader than things like certification, right? And so I think it's an important question to ask. Because then it makes the comparison between license and certification problematic. Because you're a BMW certified mechanic, which is a different kind of certification than being a Nissan certified mechanic. The kind of computer that exists in a BMW is different than the kind of computer that exists in a Ford, which is different than the kind of computer that existed in a Ford 10 years ago.

And so certification and licensing can do some of the same things in the labor market. But they also do very different things. And so asking which is better, license or certification, becomes a question of a complex relationship between the task, the person, and then, of course, the data that we have and what level that data is measured,

TIMOTHY DEYAK: Professor Timmons, thanks.

EDWARD TIMMONS: I think when we're thinking about the data that's available and the questions that we're trying to answer, we have to think about what happens at the fringe of some of these occupations. For instance, if we're thinking about teeth whitening, I don't think that we would classify somebody that is offering teeth whitening services in the mall as a dentist. So how do we track, how do we get some information about these fringes. And hair braiding is an example. We could think about animal massage. You know, I think we have a hard time making the argument that giving a massage to a horse classifies as the practice of working as a veterinarian.

Yet veterinarians in many instances would argue that it does. So getting at these fringes, getting at these occupations that pop up perhaps as a result of occupational licensing laws, I think is an important question. And I don't know how we can proceed to, without doing interviews of animal massagers and getting at some of these fringes, I don't know how we can get at these groups.

DANIEL GILMAN: Sorry, was there, do you see one of these questions you want to?

TIMOTHY DEYAK: Not that follows here.

DANIEL GILMAN: OK. How would the research develop to take into account these fringe, as you call them, fringe services? If we're already framing things, what should we look at?

EDWARD TIMMONS: Well, I mean, I think ideally we would have, and I think there's a good question we should ask. We're collecting data. We're doing surveys. How fine do we want to get with the occupational classifications? And obviously there's costs involved with getting to that degree of grain.

But if we want to answer some of these more complicated questions with respect to the fact of occupational licensing, and trying to disentangle is it anti-competitive, is it something else, I think it's necessary to potentially be able to do a deep dive into looking at some of these finer professions. So barring adding more finer qualifications or more finer classifications into the question, or somebody getting funding to do some sort of field research or experiment looking at these particular practitioners, I don't see an easy way around it.

JULES VAN BINSBERGEN: Just one more question I wanted to add to the mix which really surprised me, which is, if we really believe that we're providing information to people about how good particular services are going to be, then why is it that when we do a lot of these exams, we only communicate whether people pass it or not? But to the degree by which they passed them is withheld. Also, there's a whole database on lawsuits against doctors and also convictions. And those, it's really hard to get the information on the doctors that are underlying these lawsuits.

So just in terms of getting a sense of what the true objective is here, if you really wanted to inform the consumer about the quality of the good that they're getting, I don't see why that would have to be a 0, 1, cut-off and why we wouldn't then communicate more information. So it clearly seems that we're just excluding part of the population. And everybody that makes it through who gets the higher rents.

ABIGAIL WOZNIAK: I'd say it's a fair point that we would like to know more about how qualified qualified people are. I just would throw out there, I think we have some flavor of that from some of the research in education. So that's been one area where some of the reforms have been accompanied by evaluation.

And it's also been easier to track exactly what teachers have in the way of certification. Not just are they licensed or not, but did they complete various additional certifications or do they have other qualifications? So that's one model, literature, to look to to try to think a bit more about getting a kind of finer grasp of qualifications among licensed professionals.

MORRIS KLEINER: Just going back to the technology revolution, the ability of consumers to have so much more information just in the palm of their hand through an iPhone, that a lot more information is available to consumers. And one of the questions that you need to ask is, what does licensing provide beyond what is available?

And if it's considerable, that is, by having a government regulation, does it provide more information or dramatically more information to protect consumers? And certainly some form of

government regulation is important. But I think that the ability of consumers to make choices is enhanced by the decrease in the price of information.

EDWARD TIMMONS: Professor Redbird, you want to come back?

BETH REDBIRD: I think, firstly, Jules' entire presentation made a really interesting point about the nature of education as it relates to licensing. You're failing of the test I thought was fabulous. In that, yeah, we have to ask, is there a good relationship between the educational standards or the entry standards of license and the actual quality produced? And if anybody can tell me how to know quality, you'd revolutionize research.

Because what is a good attorney? What is a good hairstylist? What is a good massage therapist? What is a good physical therapist? What is a good cab driver? What is a good equine dentist? And what is a good rainmaker? And how do you compare these things? And so the question of education and quality, we frequently link them. But they're really divorced from one another.

And then we also have to ask the question, there's upfront education to get the license. And then there's continuing education after the license. And I suspect one of the things that we do with both before and after education is that we standardize what happens in that occupation, right? We're teaching you, when you go to continue your education, you do your CEs, we're teaching you how to do your profession in the way we've decided as the licensing board you should do it.

And so I think there's also a real question to be had, do we decrease innovation by doing that? And then the flip side of that is, I think, what Morris got at. When you look at just quality, questions of informational asymmetry are not the only thing that license accomplishes. And I get this question a lot. Like how is my license different from Angie's List? And the answer is, your licensing may give consumers some information about your skill.

It also gives your employer some information. It gives the state the opportunity to enhance certain aspects of workforce well-being. It creates maybe a relationship with quality. It maybe prevents consumer burdens or it maybe decreases the likelihood a consumer gets hurt. It might very well help you get a job. It might very well help your employer decide how you do things. And it might very well structure the tasks that you do when you enter that occupation.

And so licensing is different from Angie's List in that its point is not solely to cure informational asymmetry. And our theory has been focused on that for so long, we've forgotten that it has these whole other aspects to it that change the way a workforce operates. And so I come about my research asking, what do those other things include? And how do we completely restructure the way workers work when we license them?

DANIEL GILMAN: I guess, Professor Timmons, and then we want to get a couple more questions in. This is a great discussion. Time is ticking away.

EDWARD TIMMONS: So I mean, again, I think it comes back to what we're trying to accomplish with occupational licensing. If we're interested in promoting skill development, if we're interested in promoting access to the labor market, which I'm not convinced that

occupational licensing does, but I think that there are other avenues for doing that that don't seem to have the same negative consequences that seem to be associated with occupational licensing. I think certification, perhaps combined with some other means, very well can accomplish many of the same objectives.

DANIEL GILMAN: We are going to review all of these questions. But I want to make sure that we at least ask one here in real time. And this is an interesting question that bridges the two licensure roundtables we've had this year. Maybe there's a variation here. It touches on the mobility question, but also the rise of licensure.

What do you believe is the impact interstate compacts, which we've seen emerging, would be on reducing the amount of state licensing? And I guess maybe an empirical follow up would be, not just the amount of licensing, on some measure, but maybe, have you started to see mobility effects, other things like that? Mr. Kleiner?

MORRIS KLEINER: Thank you, I ought to give you a 20 after this. This is related to my current research with Janet Johnson, also at the University of Minnesota. And we're looking at interstate migration of individuals who have state specific laws. So for example, in teaching, moving from one state to another, it's very state specific. And if you're moving from Alabama to Minnesota, you probably will have to go back to school for a couple of years and retake a bunch of tests. So you don't get a lot of people moving. So it's very difficult to move across state lines.

But in other occupations, such as medicine, there's compacts across all states. And we find in the first case, where you have state specific laws, there is dramatic reductions in across state migration relative to within state movement that are far distances. So that's our comparison group. Where we don't find any effect on migration is where you do have these compacts. And it's fairly easy to move across state lines. So I think that this is using the American Community Survey over a number of years. So yeah, I think that if interstate migration and labor market efficiency and the ability to maximize efficiency in geographic labor markets as well as moving from occupation to occupation, that the ability to move across states really matters.

DANIEL GILMAN: Let's see, Professor Redbird and then Professor Wozniak.

BETH REDBIRD: I just recently did some interesting work in this area, too. At least, I think my work is interesting. You can judge. In asking what it does to international migration, so we've all, of course, heard that story of the guy who had his PhD and was a doctor in India and here he's a cab driver. And what we're really talking about is the decaying benefit of higher education done outside the United States. And so I look at individuals who either recently arrived in the United States or individuals who did the predominance of their occupational education outside the United States and compared those to those who have been there a long time or did their education here.

And to some extent, it appears as though licensing can cure some informational asymmetries between workers and employers. So for example, if you sit across from me and you say I went to x University and studied physical therapy, I'm going to say, where? You're going say, in Indian. And I'm going to say, is physical therapy the same thing in India? Right? And that's an employer

attempting to evaluate the quality of an education, the way tasks are done, in an environment in which they have no additional information.

And so what we find is that licensing can help cure that problem. Because the state then does that assessment. And workers can come in and say, see, I'm licensed in this state to do physical therapy, even though I did my education outside. And so it actually enhances the rate at which people enter an occupation having recently migrated. That being said, it's important to note, licensing is not the cure for everything or anything. And the relationship is complicated and depends a lot on the type of occupation and the type of education done outside the United States.

DANIEL GILMAN: Professor Wozniak?

ABIGAIL WOZNIAK: Yeah, I think the question of whether changing patterns in US internal migration are related to licensing is a really interesting one. And somehow I think I had hoped this would be one of the easier ones to answer that was out there hanging in the air. I think it's going to require a couple of additional waves of research. So I think Professor Kleiner's work will be really interesting.

I think the results from examining the nurse licensure compact, there's a University of Michigan study from the Economics Department finding very little in the way of mobility effects of the nurse licensure compact. I think that was a surprise. And they have some interesting hypotheses in that paper as to why the effects for that particular compact on geographic mobility might have been modest. I think, in case anyone is wondering, I think the hypothesis they put out is that the relicensing in the case of nurses was not as onerous as it might be in other professions.

So certainly something, but when you're considering an interstate move, that particular barrier may be smaller. Again, it's a hypothesis. But I think the data were surprising, that the impact on migration of nurses was really modest, even when you looked at pretty young workers who would find it fairly easy to pick up and move.

And then I have some of my own research that's in demography with some co-authors. We looked at states that had had what we assume to be the biggest expansions in licensing. And we can't know that for sure, because we don't know really what the licensing at the state level data was in the '60s. But we assume that if you have the high rate today, that you had the biggest expansion.

We actually find that states, the amount of licensing expansion in a state is not related to its decline in geographic mobility, once we control for other plausible factors. So I think a lot remains to be done on this. Even though, like I said, I think it seemed like a straightforward question and one that we hoped we could nail down really fast. I think more work remains to be done there.

DANIEL GILMAN: Professor Timmons.

EDWARD TIMMONS: Yeah, with respect to interstate compacts, we're seeing a lot of movement with respect to nurses, potentially some movement with nurse practitioners, physical

therapists, medical doctors. I think just a word of caution with respect to these sorts of arrangements and thinking about them moving into other occupations. With a wide degree of requirements for occupations outside of those in health care, one concern that I have is, will there be a ratcheting up with respect to licensing requirements?

If a state, for instance, has requirements for licensing or perhaps does not have licensing requirements, will there be some push in that state to newly license that occupation, or ratchet up, the existing licensing requirements to meet the requirements of the compact and to ensure mobility? I think that labor market mobility is an important variable. And I think it's certainly something that we need to be concerned about with respect to occupational licensing. But if it means that we're going to raise the barriers of entry so far that we're potentially going to keep people who might have otherwise entered the occupation from doing so, we need to step back and perhaps think more carefully about these sorts of compacts.

TIMOTHY DEYAK: Let me change the focus here. We obviously are not going to agree on specific models and maybe on specific goals. But if you had to go out and estimate the set of variables that would allow you to determine whether licensure of a particular type was, I'll say good or bad, depending on how you define your goal, what data would you have to have that you don't currently have access to? What are the key variables you would want to get?

THOMAS KOCH: So this is where I think what we've been trying to do in focusing on health care gives us the best chance for this. Because there's a lot of data relative to horse massages to try to figure out what's going on in the world. There's data on prescriptions. There's data on health outcomes. There's data on going to the doctors. And so that's, in part, within economics broadly, there's been a push towards health. And I imagine, in part, because it's important, in part, because there's a lot of data.

And so in terms of the left-hand side stuff, with all-payer claims databases and the Medicare claims databases, we're starting to make progress on that. The issue is on the right hand side, either in terms of identification, you need either people to move states or states to move policies. And that's always something that is a matter of taste and trick.

And then also, these are written laws. They don't codify very easily, map very easily into zeros and ones. And so there is always a matter of converting the law into economics and translating thou shalt into you dids. And so, you know, if there were some way to, and there probably isn't an easy way to do this, but just to codify the history of these laws and make them into a uniform measure, that would be useful.

JULES VAN BINSBERGEN: So just to repeat what I think Morris said a couple of times, I think if there's any way to not do a license, but do a lighter version of it, I think that's always preferred. Pretty much, we need to talk about really exceptional circumstances before that's not the case. And also to really sort of add to what Beth said earlier, I think that, of course, there's a difference between licensing and certification. And we can talk about what exactly we mean by each.

But what I think is just as important, that whatever licensing things you then want to do, if at the end, the consequence is just that the person who didn't meet the requirements can still practice.

So you communicate who is licensed and who is not, or better than that word is certified, or who is not. But therefore, it doesn't prevent potentially skilled people from still exercising.

Information is still provided, who has the certification and who doesn't. That's why the literature, I think, broadly has come to the conclusion certification and providing the information is better than licensing. Because it doesn't have that negative consequence of potentially excluding skilled laborers from the labor force. So you can keep everything the same as long as the final consequence is not so radical.

MORRIS KLEINER: In terms of getting at quality, the kind of data, I mean, this is sort of inside baseball here. But what kind of data would I like to have in terms of, does licensing influence quality? Well, one is customer satisfaction. But it really is specific to the industry. I'm looking at the effects of licensing in mortgage brokers. I'd want to know subprime interest rates. Did they give out a lot of these? Were there a lot of foreclosures by individuals who were or weren't licensed? In the case of health, is there malpractice? In the case of dentistry, having another dentist looking at the quality of restoration.

In terms of some of the work I'm doing on Uber, measures of customer satisfaction, measures of safety. Are there a lot of fast starts or fast stops by drivers? So all of these, largely, have to be specific to the industry or occupation you're looking at in terms of trying to get a handle on quality. And to the extent that licensing enhances quality, those are, in general, some measures that I would hope you could get at. And by the way, I could say, gee, this is stuff that I thought of. This is the stuff the FTC was doing in the 1970s, using exactly these kinds of measures. And they dropped the ball and hopefully they'll pick it back up again.

DANIEL GILMAN: Tom, can I ask you a follow up question? You mentioned health care and all the data that we have in some of these areas allows us to do different kinds of scrutiny. You know, these licensure laws, statutes, and the regs tend to vary state by state. A lot of times when we look at competitive effects, particularly in health care markets, merger cases, even conduct cases, we're looking at much smaller areas. It has sort of a geographic market. It's not always the same acreage or anything.

Frequently, it's much smaller than the level of the state. Although sometimes it crosses state boundaries, of course. What's the opportunity here, given the data that we have? And to what extent have we seen research that does both? In other words, it's looking not just at the effects of the licensure requirements and the stringency in the licensure requirements, as they bear out across the state on average, for instance, but in here or there where there is greater or lesser concentration of service providers or some other?

THOMAS KOCH: So when we think about the potential positive effects of licensure, because in many ways the demand for health care is so local. That's again, part of the reason why all those, I guess they were blue states, though they aren't blue states, those blue states that do have the very broad scope of practice laws, that's the benefit of it. Because the empirical evidence that leads into antitrust analysis tells us that health care markets are very local. Anything that you can do to improve access to care at the local level will ostensibly have positive benefits.

That said, just because something is not an antitrust problem in the way that we might litigate it doesn't mean that it is something that wouldn't be beneficial, right? So in the flu shot example that we're working on right now, just because we don't necessarily think that CVS is competing with a hospital over a wide variety of services, doesn't mean that expanded access to care enabled by some of these corporate practice laws isn't necessarily going to be beneficial. So obviously I think the two go hand-in-hand. But just because something isn't, again, per se, an antitrust issue that we would look at, doesn't mean that there are going to be benefits from improving competition.

DANIEL GILMAN: So I think are we down to two and a half minutes? Do we want to just go down the line and ask whether people have a parting shot or parting gift to offer?

JULES VAN BINSBERGEN: Just thank you for organizing this. It was great.

MORRIS KLEINER: Yeah, thank you very much. I appreciate the FTC has interest in promoting. This is an important labor market issue, as I sort of started. This dwarfs other labor market institutions, for example, unions and issues that get a lot more attention like the minimum wage. Yet in terms of coverage, this is a much bigger issue in the labor market. So it's important to bring these types of issues to academic's attention and to the public at large. So thank you for getting us together.

DANIEL GILMAN: You're very welcome. Any other comments?

EDWARD TIMMONS: I'll third the thank you.

DANIEL GILMAN: Well, that's not what I was fishing for, but thanks. Great, now my only expertise here might be ministerial. And I'm sort of spacing out. I'm supposed to ask you to, upon exit, attend to something. And I'm looking at the director of my office. Oh, the name tags, we, I mean, you can keep them, I guess. But we're trying to collect them. And then on your exit from the building, there's the temporary badge that you had.

And we're grateful to everyone for your attendance, our speakers, of course, for participation. We are going to go through these questions. We do have an open record for comments, questions, and submissions for the Economic Liberty Task Force, focused topics that came up in today's roundtable discussion, but also related issues and topics. And we hope that you'll look at many things, but look at the economic liberty web page and the resources there that can be shared and also the calls for comments and submit what you can. So thank you, all in the audience and up here for being here. We do appreciate it.