Transcript of Fed Listens: Transitioning to the Post-pandemic Economy
March 22, 2024

CHAIR POWELL. Good morning. Good morning. It's great to have everyone here today. We're really looking forward to this event. And welcome to our guests as well. I imagine you know that just a few days ago, a couple days ago, sitting around this table, the FOMC met and decided to maintain our current stance of monetary policy. My colleagues and I believe that making the right decisions on monetary policy depends on clearly understanding how people are actually experiencing the economy in their daily lives, not just on the aggregate data. And that's why we're here today. And I want to thank the members of the two panels who agreed to spare their time and share their experiences with us here today. We do have, you know, powerful tools and lots of data for crunching, to be crunched, but nothing is as informative as hearing directly from a wide range of people engaged in the economy as represented by you. We want to hear the perspective, for example, of those who are helping families get enough to eat, and also that of a farmer and a rancher dealing with challenges of producing that food. We want to hear how workers are feeling about the job market when they post a resume online. And also the perspective of employers who use that online service to try to find workers. The pandemic has had lasting effects on the economy. And we'll hear today how parents are doing finding childcare, and how our nursing school is responding to the well known shortage of nurses. It was around two years ago that the surge in goods purchases during the pandemic led to a pivot to service spending and a slowdown in manufacturing. Data on manufacturing can tell us some of what's happening, but we look forward to hearing from our panelist today, who is working closely with hundreds of manufacturing businesses to understand better why that is happening. These Fed Listens events represent our continuing and deep interest in hearing these and other perspectives on how people are faring in the economy, and how Fed decisions are affecting that experience. So, thank you again all for being part of it. And I hand it off now to my colleague, Governor Miki Bowman, please.

GOVERNOR BOWMAN. Thank you so much, Chair Powell. Good morning, everyone. It's great to have you here this morning. And I'm so pleased to be hosting with my colleagues another Fed Listens event here at the Board. It's great to be together in person. And thank you to our Board members who are able to be here with us today. I'd also like to thank our six panelists for traveling all the way to Washington, D.C. to be here with us today. And for your willingness to share your perspectives on current economic conditions. When we say that our policy decisions are data dependent, people tend to think that we're only referring to the national statistics on employment, inflation, and economic activity. But when FOMC participants come to each policy meeting, they bring to the table a much broader set of information that includes reports gathered from numerous conversations with people across the country, conversations like those that we'll hear today. Over the past few years, the frequency and extent of data revisions, for example, like those that we saw in the most recent employment reports, have made the task of assessing the current state of the economy, as well as predicting how the economy will likely evolve, especially challenging. That's one reason why these Fed Listens conversations continue to be a valuable resource for us as policy makers. They provide important context to the economic data that we consider. And they help us develop a richer understanding of how economic conditions are affecting people in their everyday lives. In doing so, these discussions help us think about how we can best achieve stability and support for the economic well being of all families. We'll have two panel discussions this morning, and I'll be moderating the first panel, and Vice Chair Jefferson will be moderating the second panel. Thank you very much, Vice Chair. In our first panel, we'll hear from three people who bring direct knowledge and experience about how American families are faring, and how they've been adjusting to the economic landscape since the pandemic. Our second panel includes three people who represent key industries, including manufacturing, agriculture, and healthcare. So, we look forward to hearing from all of you, and my fellow Board members, I encourage you to ask any follow up questions that may have along the way as we have these conversations. But we'll begin with our first panelist on Panel 1, Derrick Chubbs. Derrick is President and CEO of Second Harvest Food Bank in Orlando, Florida, the region's largest hunger relief agency that distributes more than 250,000 meals per day in six Central Florida counties. He previously led the Central Texas Food Bank in Austin for five years. Prior to joining the Food Bank Network, Derrick held both regional and national executive roles with the American Red Cross, and held senior leadership positions with IBM, Pervasive Software, and Dell. So, Derrick, we'll go ahead and get started with our first question. How has food insecurity evolved in your community since our last conversation in 2022? And thank you so much for joining us again.

DERRICK CHUBBS. Thank you, Governor, for having us, having me, and everyone else that are on these existing panels of a second time. So, we're more than happy to talk about that. Also, thank you for the work that you've done thus far in controlling, slowing, potentially reversing some of the potential challenges that we were seeing from an economic level. But I want to start with doing two things. In the bio, you referenced that when I was here last, we were distributing the equivalent of 250,000 meals a day. The number is now 300,000 meals a day. And we picked up another county along the way. So, my territory grew a little bit. We've been, but I also want to add that one of the things that has been evolving during that time period, the profile of those who are depending on the charitable food system is evolving as well. We have an idea that when someone is hungry, they're either unemployed or they're homeless, and that was not necessarily the case before the pandemic. And it's even worse today. We're seeing more and more of our friends and neighbors depending on our services that are working, sometimes two and three jobs, some own homes, and that's what we're seeing today. So, the profile of the typical person, depending on our services, is evolving along with everything else. Also, from a Florida perspective, we are seeing the long tail of recovery from some of the natural disasters that we've seen as well. And I'm sure that's not just us. That's happening certainly in the South, but across the entire Feeding America Network that we're all, that we're one of 200. So, these emergencies hit low income, middle income families, who can't even afford to prepare for this in advance. And according to some of the survey data that we've been looking at, around 70 percent of Americans are basically living paycheck to paycheck. So, if that's the case, anything that throws off the system, a flat tire could do something like that, if there's nothing, if there's no savings. And that's mostly what we're seeing. So, while inflation is slowing in many sectors, prices aren't necessarily decreasing at a proportionate rate either. So, the families that we talk to, and that's back to that 300,000 meals a day, the families that we talk to tell stories around how high, or the challenges associated with housing. I talked to one, and she said, well, my rent has to eat first. And then after the rent, there are the other fixed costs that are associated with it. So, we're finding them using food to help balance a monthly but. Whether or not I'm going to eat, or whether or not I'm not going to eat so that my children eat, or whether we're not going to eat healthy food, and we buy the junk food that's not necessarily good for us. So, wages haven't necessarily caught up with the rate of inflation. I'm not telling you anything that you don't know already. But this is what we're seeing in the hundreds of thousands on a daily basis. So, with food being a household budget item, there are all types of decisions that have to be made that are challenging to those that we see today. From a Florida specific perspective. When we speak in terms of those who own homes, the challenges with the cost of insurance, and the availability of homeowner's insurance, those costs are rising, and they have to make up for that. That's the families. That's the senior on a fixed income. That's a major challenge that we're seeing. My homeowner's insurance is up in Florida. So, I know this firsthand. We know this firsthand when we go to the grocery store and we see that prices have increased. And with Florida, or with Central Florida being a major hospitality town, then we find that so many of those who depend on our services are in the hospitality industry. And forgive my personal opinion, if you're working 40 plus hours a week, I really believe you ought to be able to afford food. We're talking about food at the end of the day. So, just a quick recap on the question, Governor, right before the pandemic, in Central Florida, we were distributing around 150,000 meals a day before the pandemic. During the pandemic, that number doubled to 300,000 meals a day. What passed when I was here last year, we thought our new normal was going to be 250,000 meals a day. But we found last year that that number had grown back to 300,000. And I'm afraid there's no end in sight. So, that's how things have kind of evolved in the community since we visited last time. I think it was November of '22. And it's not necessarily a pretty picture. Things are changing. But that's what our focusing. Great.

GOVERNOR BOWMAN. Thank you. And so can you share with us what your outlook is for the coming year, and for the financial well being of the families that you're serving now?

DERRICK CHUBBS. So, we are basically in the midst of a perfect storm is what I would say. Rent is out of touch with average wages. Families and seniors are living in what used to be efficiency hotels is where they find themselves living. I mentioned property insurance, childcare, simple supply and demand. There are just not enough options. So, childcare expenses are up. Healthcare, volatile grocery prices, gas and transportation, which we, as a food bank, and every food bank in the country, are challenged with as well, because the cost of me putting 24 trucks on the road every day is a lot different today than it was a few years ago. But I really want to touch on what's on the horizon. On the horizon, this summer, for 10 weeks, our children are not going to have access to the free and reduced lunch programs that they typically see while they're in school. Now, and that's just during the summer. I won't mention after school, weekends, holidays, they just simply don't have access to food. And we're trying to figure out how to do that. Thirteen million kids across the Feeding America Network that we've been able to count aren't sure where their next meal is coming from. One in five in Central Florida. I find that number unacceptable under any stretch of the imagination. One of the things that we're trying to do in Central Florida is, and we have a very active school market program that has grown considerably since 2022, we have school markets or school programs in 70 of the schools in our service area, 70 schools in our service area, and we have another 30 waiting in the queue to be a part of the program. And we've learned several things. We had one program in particular that would send a child home at night with food to eat for the evening. Well, we found that that child, when he or she took the food home, was sharing it with the family. So, it wasn't enough food. So, we have increased that number, we've increased the amount of pounds or food that we send home. And that's a major challenge for us. And it just breaks my heart, because we all know, and my friend Dawn will probably tell you the exact same thing, the challenges that are associated with children who aren't properly nourished, yeah, everything from health issues to not being able to learn and process information appropriately. So, right now, that's my biggest fear, because that ripple effect is going to hit our children. And we will scale this summer up to another level. I'll take on an additional 15 employees in driving just to hit some of those school programs and fill the gaps. We have seven schools in our area that don't even have commercial kitchens. So, we are providing all the food to those locations. So, that's a worry that I have, because it's a worry that we have every summer. But I really do not want us to lose track of those that are on the tail end of this thing. And that's our babies. So, with that point, I want to close on one positive note. This morning, literally this morning, I saw a news report. I haven't read, haven't read it in its entirety. That rent in Orlando was dropping for the first time since 2021. So, I will say thank you for that, because I am sure that's an indication of the work and the policies that you're putting forward. And my hope, my prayer is that this continues so those that depend on our services will start to see more of that in their monthly operational exercises.

GOVERNOR BOWMAN. That's positive news to close on. Would anybody else like to ask a question?

GOVERNOR WALLER. I was just going to say, yours is obviously an industry where increasing market share is not a good thing.

DERRICK CHUBBS. No, not at all. I'm not interested in growing.

GOVERNOR WALLER. Exactly.

GOVERNOR BOWMAN. Well, without any more questions for our first panelist at the moment, let's move on to Dawn DiStefano, who is our second panelist. Dawn is the President and CEO at Square One. It's a nonprofit organization that provides a range of family friendly education and support services. Square One's programs include early childhood education and care at centers in Springfield, Massachusetts, which is a home based care setting located throughout, or and home base care settings located throughout Greater Springfield, and out of school time care for elementary school aged children. Square One's parent education support and training programs are offered through groups, home visitation, and personalized case management to help parents access whatever services they need to be successful in their role as their child's first teacher. So, our first question, Dawn, is from your perspective, how has the ability of families to access reliable childcare changed over the past few years? Particularly for families at the lower end of the income spectrum.

DAWN DISTEFANO. Sure. Well, thank you, Governor, thank you, Chairman, thank you for having us here today. My friend, Derrick, who, I think our friendship is all of five seconds old, but that's how fast you make friends in this field, is because when you're called to service, and certainly in service of children and families, you make friends quickly. So, thank you for those comments, Derrick. I'm compelled to make a comment about the connection between food and children. It's really difficult to learn. It's actually really difficult to sit still when your belly is empty. And so I really applaud the efforts that you're making in Florida. We certainly see some of the same stories in Massachusetts. So, I bring good tidings. I have 500 children currently. I'm looking at the clock. I have 500 children between the ages of zero and five in my care as we speak. So, although I am sitting here in Washington, D.C., they are being cared for back in Springfield, Massachusetts. They say hello. Many of them, I had a couple that wanted to come with me. We had to look at the map and show them where Washington, D.C. was, and explain where Miss Dawn was going. So, maybe next time, I'll bring one of them with me. You might enjoy that. As we know, access to childcare is a core tenet for people to be able to access employment, retain employment, and provide for the economic stability of their family. COVID certainly was a decimating factor to childcare, where you're providing services in a congregate way. People are coming together. So, certainly that was an interesting time. At Square One, we serve the City of Springfield in Massachusetts. It's the third largest city in Massachusetts. But it's not the richest city in Massachusetts. I looked at the state median income in Massachusetts, it's $96,505. The median income in Springfield is $47,677. That's quite a difference. And so when we think about childcare for those lowest wage workers, it's important for me to realize they need to work 40 hours a week earning $47,000 a year is not easy. And then finding childcare. So, what we've started to look at in terms of strengthening access for our lowest wage families in Massachusetts is we've started working on reducing the paperwork burden. I realize I'm in D.C., and probably the IRS is nearby, but we all know that the abundance of paperwork can be quite paralyzing. And when you're trying to say yes to a job opportunity, it can be very overwhelming to come up with the litany of paperwork necessary to prove that you are eligible for financial assistance. So, in Massachusetts, we're working really hard to reduce that paperwork burden. The other thing we're doing is eliminating the types of household income that families rely on when there's a disability, your child support, and things like the money that you receive to support the food in your household, we're no longer counting those towards your household income. Because, again, it sets you up for a false narrative. You end up paying a higher childcare fee by counting those benefits. In Massachusetts, we're also increasing the threshold. For years, we have maintained a threshold that you would earn 50 percent of the state median income to be able to qualify for that financial assistance. Today, we've increased that to 85 percent. Because what we've found in Massachusetts is that half of our families are eligible for financial assistance at that 85 percent threshold. So, those are some of the things we're doing to help our lowest wage families. At Square One, I think one of the reasons that I may have caught the attention of folks in Massachusetts is we were trying to identify through the pandemic what could we do that's different to be able to address some of the challenges our families are facing. And so we started to reach out to some of our largest employers to say, your lowest paid workers, your housekeepers, your patient advocates, your food service workers, the very people you need to keep your hospital flowing, your business open, they rely on childcare. And so what we did is we established sort of a non traditional arrangement where we said, what if we provided back up care to your employees? Most people have their childcare arrangements already set when they're working. Where low wage families struggle is when that one childcare option isn't available. And during COVID, we saw that happen quite often, where your mom got sick, your babysitter was sick, and you can't go to work, because you don't have a plan B. So, at Square One, we created that plan B with our largest employers in Springfield. We said, we often have a seat that's empty at Square One. What if you as the employer that need, Governor, to go to work, we're going to pay that back up fee so that Square One can take your child that day as a back up care option. The employee goes to work, and the business is able to thrive. So, it's those unique private public partnerships that we're hoping to share with others, because we think it's a replicable model. We also established some non traditional hours for our family childcare providers. Those are folks that have opened their businesses in their home to care for children. But we've encouraged them to think about operating during those hours of overnight, hours from 5:00 in the afternoon until 3:00 in the morning, so that those second and third shift folks can find the childcare that they need. I would say one of the things we're struggling with, and lower income families certainly, it's an unintended consequence, but when we talk about universal preschool, many of us saw that in President Biden's Build Back Together plan, it's a wonderful option. It's a great option for families. But it doesn't typically cover the 52 weeks a year of care that you need. At Square One, that is what we do. We provide 52 weeks of care for 10 to 12 hours a day for children and families to be able to go to work. So, although it's wonderful for communities to have access to that universal preschool, it requires a partnership with your private providers to ensure families can still go to school. Most preschools are only open six and a half hours a day. And so that's been one of our struggles. So, that's, you know, between the individual work we're doing at Square One and the policies we're setting in the Commonwealth of Massachusetts to reduce the paperwork burden, increase the inventory of childcare opportunities. I think our families are starting to see a change. It is not a profitable business to be in. The 500 children that are in my care today, 100% of their families are receiving financial assistance. So, I serve the very families that you're asking about. It is not easy to maintain this business. I am lucky if I break even. We've reduced, we might have even eliminated all of the processed food on our food venue, Derrick, I thought you might like that, but I'm deficiting $50,000 this year in my food. That's just by giving children fresh food versus canned food. You lose a lot of money doing that.

GOVERNOR BOWMAN. So, starting from that $50,000 deficit, what other constraints are organizations like yours currently facing that prevent you from offering services to more families? And then the second part of that question is how do you see these forces evolving over the year ahead?

DAWN DISTEFANO. Well, I think there's some great news. Massachusetts is certainly leading the way. Most of our federal support dollars post pandemic have gone away. Massachusetts has chosen to invest state dollars where the federal dollars migrated away. And so we have maintained operational grants. Many of you here may not know that a lot of childcare contracts, especially for agencies like mine, where we serve those very children that need financial assistance, those are multiyear contracts. So, the last contract I signed with the Commonwealth to provide my services was close to 12 years ago. And so when you contract for a certain amount of slots, 12 years ago, it doesn't leave much room for growth and opportunity to serve more. And although we have some flexibility, it's very limiting. The other piece that's very limiting from a contractual perspective is we utilized a market rate survey to establish the government reimbursement rate that we receive. In a lower income community like Springfield, Massachusetts, the market is the government subsidy. So, your market rate, when it becomes the government rate, doesn't allow for companies like Square One to be able to pay our bills. It doesn't match the true cost of providing childcare. I have opted not to talk about the wages of childcare workers, because I think we could talk all day about the low wage of folks that are providing this service. But that's part of the problem we're trying to solve is we need to increase the value, and we need to increase the wage that those workers are providing so that we can start to grow the inventory. But when you're constrained by a market rate, and you're constrained by a multiyear contract, it makes it difficult to grow this business. I think some of the ways we see hope on the horizon is opportunity, you know, challenge, usually, I see it as an opportunity, and so to me this was an opportunity to partner with my local businesses, to come up with ways how we can invest private investment dollars into a childcare field. As I said, we all win. If I can take care of your child and you can go to work, and the business can operate, then everyone thrives and flourishes. So, we're looking to do more of that.

CHAIR POWELL. I can't help with my finance background wondering how you fund these incredibly important activities. Just at a high level. Is it mostly state government, federal government? Is there a significant private fundraising effort to support these, again, incredibly important activities?

DAWN DISTEFANO. Great question. Thank you for asking. Our agency is about a $10 million agency. That's about our annual budget. Ninety two percent of that funding is directly state reimbursement for the care I'm providing to children and families. Springfield, Massachusetts is about two hours outside of Boston. Our philanthropic power is definitely not on the same level as Boston. I think I said to one of my colleagues, I'm jealous at all times of the fundraising power that my Boston colleagues have. We do need to fill the rest of that deficit, that 8 percent that's left is fundraising. So, it's really a combination of government contracts. And then private foundations.

DERRICK CHUBBS. We're one of those that has the benefit of being able to fundraise. And around 60 percent of the money that we're able to raise in our operational budget is about $38 million. And we are able to fundraise for a significant portion of that. But then we also depend on foundations and grants from the state and some, a couple from the federal level. From the federal level, we largely depend on food, TEFAP food. And that's food that, and it's healthy food, but we've seen a significant drop in that availability over the last, over the last couple of years. But the need went up. So, we're having to pay for that food. And that, in and of itself, is a model that's just simply not sustainable. We've gone up around 30 percent in the amount of money that we spend to buy food. And we buy –

CHAIR POWELL. Inflation.

DERRICK CHUBBS. Yes. Inflation and transportation cost as well. Right. And we have to do that to fill some of the gaps, make sure that we're providing healthy food, we're trying to dial back sugar, sweetened types of food that we send out, particularly to the schools. And so we're fortunate to have a robust community that supports us from a philanthropic perspective. But our spend today is not as sustainable in the long term.

VICE CHAIR JEFFERSON. Jefferson. I'd like to so, I have a question also for both of you, with respect to your workforces, and where you draw your workers, and how you're able or not to retain them. So, if you could just talk about the people doing this work, that would be helpful.

DERRICK CHUBBS. Want me to go first?

DAWN DISTEFANO. Please.

Derrick Chubbs. We are fortunate, and I actually, just a couple of days ago, spent some time with some students who asked about the culture of our organization. I'm fortunate to have 173 employees that are totally dedicated to the mission. I don't necessarily have a problem finding people that want to work. Now, they know they won't get rich. But they believe, like all of us do, that you should have food on your table multiple times a day. And that is what sustains myself, and I would argue most of my peer food banks across the country in the Feeding America network. So, I don't – so far, we're not necessarily having problems keeping them or retaining them. Now, there's the reality of retention, because the pyramid is only like this, and if I'm ambitious and I'm a new masters student that just got out of school and I want to be a chief operating officer one day, I may not hang around long enough. But we've, you know, we've embraced that. And we've embraced development programs actually to help them do that. That's what keeps them longer, because we're working on that. But we are fortunate enough to not have had a problem keeping or maintaining employees.

DAWN DISTEFANO. Gosh, the average number of years that a Square One teacher has been with us is 22 years this year. Through COVID, we maintained 100 percent of our workforce. That is the dedication. It's the same, the folks that I employ were born and raised in the very community that they're caring for, for the children that we have in our care. So, when COVID hit, we were able to reopen six weeks after in June of 2020. I had 100 percent of my folks return to work, which I find amazing. We also have the capacity at Square One to partner with our local colleges and our local high schools. So, we have a kind of career pipeline with people that are interested in serving young children. And, like Derrick, we almost embrace the journey. And so we might have you employed and train you, and you might go to the public schools to continue your education. But some enjoy the flexibility. Fifty-two weeks a year doesn't sound as great as 40 weeks a year in the public school district. But you have a lot more flexibility in a community- based preschool for vacation and things like that. So, we're finding a good balance. For us, it's heartbreaking to me to know, I have 140 employees myself, my direct care staff are eligible for most government benefits. And just not able to pay them a wage that gets them above that median income where they come away from that eligible category. So, that's what I'm trying to work on is we're trying to simultaneously find the resources to pay people more, but also encourage them to increase their education, so that the quality of early learning and care rises with the wages that we're able to provide.

GOVERNOR WALLER. What fraction of your workforce is potentially volunteer as opposed to paid, or is it all paid?

DAWN DISTEFANO. Well, my workforce is 100 percent paid. If I have 140 employees, I have about 220 volunteers that come through. Massachusetts, as you know, is heavily educated. We have a lot of colleges. I think we have six colleges within a 10-mile radius of all of my centers. So, we, again, spend a lot of time creating those partnerships, so that college students come in and they're doing some of their community service with us. That takes time, though. It's quite an investment to establish those relationships and keep them going.

DERRICK CHUBBS. We could not do what we do without the dedication of volunteers. We have about 30,000 volunteers that come through the Second Harvest Food Bank alone during the course of the year. And a large portion of what they do is we get food donations from Walmarts and the like, and they come in big bins, and they come and sort the food, pack the food. We have a commercial kitchen that prepares the food for the schools that I talked about. So, we have volunteers that come and help that. Our volunteerism saves me around $7 million.

That's money I can turn around and purchase food with. So, without them, we would be dead in the water. Them, as well as we don't distribute food directly. We're the hub. We distribute the food through around 700 different other nonprofits throughout the seven counties that we serve. And so we simply could not do what we do without the generosity of volunteers.

GOVERNOR BOWMAN. I think Governor Cook has a question.

GOVERNOR COOK. I have just a couple of quick questions. So, thank you for the work that you're doing. Dawn, what is the minimum wage in Massachusetts and in Springfield?

DAWN DISTEFANO. Fifteen dollars an hour right now.

GOVERNOR COOK. So, they're the same.

DAWN DISTEFANO. Well, our minimum wage at Square One is $16.21 as a starting teacher's salary at Square One. Those are union positions. My starting wage for other positions is $17.00, but our minimum wage in Massachusetts is $15.00.

GOVERNOR COOK. Okay, thank you. And you were saying that at the beginning, you were offering these services to local employers. Are they paying like the government or are they paying sort of market rate for childcare?

DAWN DISTEFANO. They are. They're paying market rate. So, the best example is our large healthcare system. They are, Baystate Health is one of our largest employer partners. They require, again, and what they've done is they've migrated this back-up care into their recruitment process, their hiring process, and their retention process. And they haven't started, but where they're moving to is having an hourly wage threshold, where if you earn under a certain amount, they would pay in full the private fee that I charge for those back-up seats. Because, again, they need folks to be able to come to work, but they can't always afford the private fee. So, I have my government reimbursement fee, and my private fee is always 5 percent higher than what the government fee is, because I try to keep it as a reasonable fee for those families that don't make the threshold. And the employers, for certain folks, will reimburse.

GOVERNOR COOK. Derrick, with respect to the Feeding America network, how do you leverage it for both fundraising and for volunteers?

DERRICK CHUBBS. Again, that's one of the, one of the advantages of being part of the network. We couldn't function without it. Feeding America, for the entire network, is able to leverage those national relationships that I might not do locally. With that, they're able to get us better pricing for food. With that, there are organizations that would like to make the donation to Feeding America, and then Feeding America, in turn, distributes it to those of us locally, based on need, based on size, need, and the like. So, I am a major fan of having the headquarters group up there, because they are helping us with everything from just the food, the fundraising, as well as some things from a best practices perspective. Technology is a major challenge that we're all having right now, from with us in Central Florida, I would like to have more visibility into those 700 organizations that distribute food to us, for us. But some of them, especially the smaller ones, don't necessarily have access to that technology. So, what's that model look like, where I can maybe take a tablet and send to someone so they could do that? So, yeah, they are a major, major portion of our success.

GOVERNOR COOK. Thank you.

DERRICK CHUBBS. Yes, ma'am.

GOVERNOR BOWMAN. Thanks for these wonderful questions, everyone. We need to move onto our third panelist. So, switching gears a little bit.

SVENJA GUDELL. I'll talk fast.

GOVERNOR BOWMAN. To continue the conversation about hiring and job openings, our third panelist is Svenja Gudell. Svenja is the Chief Economist at Indeed. She leads the Hiring Lab, which is Indeed's economic research group. Prior to joining Indeed, Svenja was Chief Economist at Zillow Group. And she also worked on economic financial and strategic consulting for Analysis Group. And she was an assistant economist in the research group of the Federal Reserve Bank of New York, so fellow Fed person. Svenja has a PhD in finance from the University of Rochester, so thank you for being with us today, and we look forward to hearing your perspective on these issues, too. So, I want to start by asking you about what trends you are seeing among people who are searching for jobs currently. Over the past year, what types of job postings saw the strongest increases in applications? And do you expect those types of trends to continue in 2024?

SVENJA GUDELL. Sure. Well, first of all, I would like to thank you, Governor Bowman, and the rest of the Federal Reserve, of course, for having me here today. It's super exciting to be able to share some stories and some data along the way. We have a lot of data at Indeed. And so, it is my distinct pleasure as an economist to be able to talk about this and have this conversation with you today. To answer your questions, I'll be relying extensively on data pulled from Indeed job postings, from clicks that we get on job postings, as well as applies data, as well as surveys that we have taken, having, getting responses from job seekers and employers along the way. Of course, what economist would I be if I didn’t have charts? So, I did bring a chart book. I won’t reference it. But if you are curious, feel free to –

CHAIR POWELL. We are.

SVENJA GUDELL. Excellent, feel free to check it out. And I would be remiss if I didn't mention that all of our data products with Indeed, job postings index, our wage tracker, are available on hiringlab.org. That's our site. And you can download all that data. As I like to joke, Friday night, glass of wine, whole bunch of data. You know? I'm a dork, yes. So, let's dive right in. I'm struck by how interconnected a lot of what we're talking about today really is, right? Food, education, care, having a job. And it will all kind of come together when you look at it across the board. Housing, of course, in there, too. And really, as the labor market has been returning to its new normal, I guess now, some of the trends that we saw during the pandemic are here to stay. The Indeed Hiring Lab research shows that even now, three years after the worst of the pandemic is over, remote and hybrid work are still extremely popular and quite prevalent. Both the share of job seekers that explicitly search for remote or hybrid work on Indeed, as well as the number of job postings that offer either remote or hybrid work, are still relatively high, even though they have fallen slightly since their peak in 2023. However, the modest decline in the share of job postings advertising this remote work is less of a signal that employers are changing their mind about remote work. I think it still remains an attractive feature for a lot of employers. It's really more sense around what we're seeing in the labor market as a whole in the mix of jobs. Overall, the level of job postings on Indeed remains comfortably above pre-pandemic levels. So, demand for labor is higher than it was pre pandemic. But it's been coming down slowly. And you are very familiar with this, of course, as you look at your data regularly. And as the labor market has slowed over time, the mix of jobs that we're seeing being posted has changed significantly on Indeed. For example, postings for roles in tech and corporate sectors, including software development, IT operations and help desk, and bank and finance, have exhibited more significant declines as employers have started to pull back and hire less in those sectors. And it's typically these type sectors that actually offer remote work. So, as we see fewer of these job postings, we also start to see fewer remote postings be available on Indeed. Despite the enduring popularity of remote work, it is postings in sectors that are typically in person, and generally lower-paying jobs that are currently getting the most application activity on Indeed. So, in February, job postings in administrative assistance and food prep and service each received almost 9 percent of all job seeker application starts on Indeed, so you actually go and click on Start an Application on Indeed. Job postings for roles in customer service, retail, and sales, all received more than 6 percent in total of total application starts in Indeed last month. Sectors with the biggest growth over the past year in applications include several tech and tech-adjacent sectors, including the software development, information design, and documentation, and operations in help desk services, sectors, excuse me. It is important to know that the growth in application in some of these sectors over the past year is coming off of relatively low base. So, for example, if you're looking at software development, those roles, those applications are up more than 60 percent year over year, but they represent fewer than 4 percent of all total applications that were started last month. It's not yet clear to us what's actually driving these large increases in application activity in tech and tech- related fields. But it's something that we continue to certainly analyze as we dig into the data. We're seeing some early signals that there's a relationship between job sectors that are pulling back in terms of job postings the most, including tech, and an increase in apply share, speaking towards the phenomenon that as people are let go, or as more people are interested in these particular sectors, you just get more applies in these sectors than what's shown happening in general, which certainly holds true for a lot of these other sectors as well, that there's more turnover, and, therefore, you start to see more applies on a regular basis. So, whether workers new to the labor force, is trying to return to labor force, or simply looking around at other opportunities, we know that the allure of higher pay remains the biggest motivator for beginning a job search. After all, compensation is king. Or, as

I've been told, is queens now. According to a recent Indeed survey of workers currently seeking new roles, almost 60 percent cited a desire for higher pay as the main motivator in their job search. Even as annual wage growth continues to slow, employers are still showing a willingness to pay top dollars to attract talent. The share of job postings, advertising some sort of signing bonus, has also remained elevated since mid 2022. The flexibility of offering that one-time financial incentive to new workers is especially popular in fields like healthcare, I'm curious and interested to see what you have on that as well– where demand for workers remains high, and where many employers are having an incredibly difficult time filling openings. So, having that extra benefit there can be worth quite a bit. The close second behind higher pay was a desire for better benefits and more flexibility, when you're asking job seekers. More than a third of survey respondents open to or are searching for a new role, noted a desire for better benefits. And roughly a quarter of respondents said they wanted more flexible hours, and more flexibility to actually work from home. This desire for flexibility is especially pronounced among employed women, when compared to employed men. And that desire for remote work is really a main driver, particularly from women, as they're searching for a new job. And I can add that I'm a happily remote working employee at Indeed as well. And I do enjoy that flexibility quite a bit. Much of the frenzied competition for workers that characterized the job market in 2021 and 2022 is obviously over, but it's certainly not completely disappeared. As the labor market has been cooling, a lot of sectors have unevenly cooled. And we're seeing a lot of different behaviors, depending on which sector you find yourself in. And so employers may not be able to compete purely on salary all the time. And they find that they're still able to attract candidates by offering flexibility or other benefits. Employers that want to use different benefit offerings to differentiate themselves, to defray other salary costs, or just to have additional benefits, and are quite, quite prevalent still on Indeed, and we see a lot of really interesting trends that have to do with how much, how many more benefit offerings are available right now. Scheduled flexibility and the ability to work from home are relatively new benefits. Again, this is particularly a pandemic-driven trend. But more traditional benefits, including healthcare, paid time off, and retirement benefits are still really important for workers. And we find that as we talk to job seekers. The share of job postings on Indeed mentioning health insurance, for example, rose from 31 percent in 2020 to a whopping 48 percent by February of 2023. So, incredibly strong growth there. And the share of advertised retirement plans and paid time off both rose from 22 percent to 37 percent over that same time period. Now, much of the rise in these advertised benefits between 2020 and early 2022 occurred in typically low wage sectors, including food prep and service, retail, and childcare. But between early 2022 and early 2023, the pace of benefits growth and low wage postings started to slow down, so we're not seeing quite as explosive movements at this point anymore. Strong growth —in advertised has benefits for some segments, even as others have slowed, shows that the cooling market is not felt uniformly. It seems clear that there’s still sectors where hiring remains relatively difficult, and employers may feel a compel to continue sweetening the pot for job seekers to attract the best possible candidate. Our research also shows that job seekers are receptive to nontraditional benefits, and/or may seek out employers that share their own personal beliefs. So, company culture has been a pretty big driver over the last few years, as job seekers search for jobs. In fact, after the U.S. Supreme Court’s decision in Dobbs v. Jackson overturned a longstanding federal right to abortion, hundreds of U.S. employers publicly announced measures designed to ensure access to reproductive care for impacted employees, including paying for out of state travel -- for care made unavailable in the worker's home state that they are based in. Now, realistically, these kinds of benefits are unlikely to be used often, and will not apply to many workers at a given company. And just because a company did not make a public statement announcing any of these new benefits doesn't mean that they aren't still willing to work with their workforce behind the scenes. But it is clear that at least some job seekers do read these public announcements. And it's an important signal to them for company culture. And companies do reap some important recruiting advantages by sending these signals. So, we dug in and did some research and found that post ops, clicks on postings from announcing firms, increased by 8 percent compared to similar firms that did not make these announcements, and that's roughly equivalent to behavior we'd see if a company raised wages by 12 percent , we'd also see that sort of increase in clicks along the way. So, finally, another feature that we know is attractive to job seekers is pay transparency. As of January 2024, a majority of job postings on Indeed included at least some sort of information about pay, up from less than 20 percent prior to the pandemic. Much of that rise can be attributed to recent local laws requiring disclosure in some states, but the rise in pay transparence, in transparent job postings, has been observed even in areas where disclosure was not required by law. We believe that disclosing pay upfront in a job posting can also help lead to faster hiring overall, which is a better match at the end of the day. To us, it is no coincidence that paid transparency has grown fastest in a handful of industries, including childcare and healthcare, where job postings have led, have held up the strongest over the past year, with strong demand, hard to fill, and demand for workers who meets high in these industries, and employers are giving as much potential information as they can upfront in order to attract talent. In a still competitive job market, in which job openings still outnumber unemployed workers, is important for employers to meet workers where they are, and make a good faith effort to meet their demands for flexibility, and, of course, benefits whenever possible. I'm happy to take any questions on that.

GOVERNOR BOWMAN. A lot, a lot of information.

GOVERNOR WALLER. We could probably talk for half an hour.

CHAIR POWELL. Send us your slides.

GOVERNOR BOWMAN. But you mentioned some of those differences. Could you tell us a little bit more about the differences that employers are looking for in educational requirements and skills requirements and other qualifications that they may be looking for in this new working environment?

SVENJA GUDELL. Certainly. We're seeing employers relaxing the more traditional educational requirements along the way. And oftentimes in order to broaden their applicable pool of candidates. Particularly we saw this as the labor market was really tight and you had to kind of go out of your traditional pool in order to be successful in hiring. As of January, a small majority, 52 percent, of job postings on Indeed did not mention any formal educational requirements. That's up from a small minority of 48 percent prior to the pandemic. But I think most notable is that the share of postings requiring at least a bachelor's degree, so four-year degree, fell from more than 20 percent prior to the pandemic to now roughly 17 percent earlier this year. So, it's a small change, but it's actually quite, quite significant and notable. Declines were also observed from the share of jobs that offered least-- require at least an associate's degree, or even a high school diploma. Our research shows that the trend is also widespread across occupational sectors. So, within mind that this could be a mixed issue, or was not looking within sector, this all certainly holds true. And there are few reasons why employers might forego formal educational requirements in job postings. The most obvious, of course, is simply that the job doesn't actually require a formal education. It instead requires a basket of skills that are learned on the job, or that you carry over from prior experience. Beyond that, it appears that employers may omit educational requirements in job postings when they're obvious, or they're assumed or implied. A good example of this is a physician and surgeon jobs. We all know and really hope that our personal physicians completed extensive medical school training and residencies. So, it's highly unlikely that someone without formal medical training would apply to become either a physician or a surgeon. Knock on wood. Even so, roughly a third of job postings for physicians and surgeons only technically require a minimum of a bachelor's degree. Similarly, employers will often focus on requiring licenses or certifications in job postings, but omit the formal education required to actually receive those certificates. So, for example, that could be from a certification for the National Institute for Automotive Service Excellence, which actually is a certification, but you need some vocational training to be able to receive, and, you know, if you go to like your local garage or have seen the ASE sticker on the garage or the overalls that a mechanic might wear. So, none of this should be read as any kind of a disparagement of the value of a formal post-secondary education. Stay in school. The life experience, social connections and soft skills learned in college and beyond still matter a great deal. And there's abundant data pointing to the financial benefits of actually having a formal education. But it feels safe to say that some formal educational requirements are unlikely to then disappear entirely from job postings, especially in areas like healthcare, engineering, and other areas that require a good deal of formal education and skill training. But a shrink in pool of job postings requiring a formal degree represents a major opportunity for the roughly two-thirds of Americans that don't have a four-year degree. Workers willing to prioritize skills development and embrace emerging technologies will likely benefit as employers adopt skills-first hiring approaches to attract the best candidates. And we're starting to see more movements towards that direction. For example, on Indeed, we have screener questions that say, can you answer these particular questions to be able to suss out skills that might not be apparent from just looking at a resume? Relaxing those requirements means employers can reap the benefits of an expanded candidate pool, which may prove vital in coming years as demographic changes hit us in our aging population will heavily weigh on worker apply. When discussing the importance of education and work skills, the recent rapid rise of artificial intelligence technologies more broadly, and generative artificial intelligence tools in particular, is currently, in my mind, the elephant in the room in all of this, right? The ultimate long-term effects of these tools remains largely unknown. We're living it right now. But they're set to impact the market in ways that are very different from prior waves of technological advancements in industrial automation. Generative AI tools, which can create text, images, or audio, represent the biggest departure from historic patterns. Looking at the history of automation, it was largely manual-type labor jobs that were impacted extensively along the way. Interestingly enough, if you're looking at the impact of generative AI on jobs, it's that list flipped around. So, historically, we thought knowledge workers were safe. Now, gen AI is actually impacting knowledge workers a lot more. So, if you're on marketing, HR, software development, our research shows that these jobs are significantly impacted. And it's the in-person participation jobs that are not as impacted.

GOVERNOR BOWMAN. Svenja, we really appreciate that. I don't want to cut you short, but we do have three other panelists.

SVENJA GUDELL. Of course, no.

GOVERNOR BOWMAN. We really look forward to your slides.

SVENJA GUDELL. Oh, excellent. Well, and, you know, all the AI data is in there. And I encourage you to look at it. There's a lot of data points. And I'm happy to answer any other questions that you might have.

GOVERNOR BOWMAN. And we may want to bring you back to talk a little bit more about all this stuff.

SVENJA GUDELL. I'd love it. Thank you.

GOVERNOR BOWMAN. But thank you to all of our panelists on Panel 1 Derrick, Dawn, and Svenja for all of the things that you do, but also for joining us today and sharing that with us. So, thank you so much. I'll turn it over to Vice Chair Jefferson to lead our second panel. And thank you so much for willing to do that.

VICE CHAIR JEFFERSON Thank you. Thank you, Governor Bowman. I appreciate the opportunity to moderate our second panel discussion today. As my colleagues have already mentioned, discussions like these are a valuable part of our continuous monitoring of economic developments because they help paint a more timely and nuanced picture of what is happening on the ground.

Another reason these conversations are helpful is because they improve our understanding of how the effects of our past policy actions are feeding through to the economy. That's the thing that we're especially focused on in the current environment, where we've raised our policy rate by historically large amount in a relatively short period of time.

Milton Friedman famously said that monetary policy has long and variable lags. And the uncertainty that comes with that variability makes our job as policy makers more challenging. The speakers here today bring with them useful insights that can help us gauge the varying impact that policy is having on different sectors of the economy at different points in time. The next three panelists represent several key industries, including manufacturing, agriculture, and healthcare. I'm looking forward to hearing their unique perspectives about how the businesses and nonprofit organizations they are engaged with are responding to tighter financial conditions, and other changes in the economic landscape that have occurred over the past few years.

So, with that, let me start by introducing our first speaker in this panel, Dr. Ernest Grant. Dr. Grant has more than 30 years of nursing experience and is the immediate past president of the American Nurses Association. An internationally recognized burned care and fire safety expert, he previously served as the burn outreach coordinator for the North Carolina Jaycee Burn Center at University of North Carolina Hospitals in Chapel Hill. In this role, he oversaw burn education for physicians, nurses, and other allied healthcare personnel, and ran the center's nationally acclaimed burn prevention program, which promotes safety and works to reduce burn related injuries through public education and the legislative process. He also serves as adjunct faculty at the University of North Carolina Chapel Hill School of Nursing, where he works with nursing students in both classroom and clinical settings. He holds a BSN degree from North Carolina Central University, and MSN and Ph.D. degrees from the University of North Carolina at Greensboro. So, welcome. My first question for you is how would you compare working conditions in the healthcare industry now with what they were in the early stages of the pandemic recovery?

DR. ERNEST GRANT. Well, good morning, and thank you, Governor Jefferson, for that introduction, and to Chairman Powell and the rest of the governors. Delighted to be here. Although I have to say that I am now with Duke University School of Nursing, so that they won't get me. Some people may say that I'm confused, but I tell people, when I went to Duke, I went there for two reasons. The first one won't tell you about, but the second one was to sabotage the Duke basketball team from the inside.

Thank you very much for the opportunity to talk to you today about the healthcare industry and where we are post COVID. As you know, or may not know, there are currently approximately 4.5 million registered nurses that are currently practicing within the United States, making that segment the largest segment of the healthcare team. Prior to COVID, we were already experiencing a significant nursing shortage. Part of that was because of people such as myself, baby boomers, reaching retirement. And that had been predicted some 20 years before, and no one did anything about it. It was sort of kicked down the road a little bit. And then when COVID happened, that sort of exacerbated that even more, because those who are eligible for retirement chose to retire early to prevent the possibility of contracting the virus. Some other things also contributed to the shortage, not only just within the nursing profession, but across healthcare all the way around. And that, again, were workforce issues such as mandatory overtime. And, again, people perhaps not wanting to choose perhaps to leave the profession. Once COVID struck, though, I was president of the AMA at the time. And we began a series that still goes on, what we call Pulse of the Nation's Nurses Survey. And the very first survey that we did back in 2020 showed that, again, elderly, or the older nurses, I won't say elderly, old, because that's me, older nurses were retiring at an excessively higher rate. It also affected black and Latinx nurses. We found that they were more likely to be in direct care of someone who had sustained the COVID virus. And they were likely to report more extreme stress, burnout, understaffing, and also mandatory overtime, which was encouraged or placed upon them by their employers.

From an economic perspective, all nurses, but particularly, again, black and Latinx nurses and other minority nurses, suffered a greater financial impact because they reported that they had to stop payment on student loans. They skipped or allowed monthly bills to lapse. And also, either had to dip into savings or borrow money from family and friends in order to stay afloat. And you may recall that during COVID, there was a lot of competition for nurses, and a lot of nurses chose to become travelers, because they could make a significant amount of money as a result of that. And in one report, as high as $15,000 a week. Whereas that sounds good, you had to work seven 12-hour shifts in order to do that. But those numbers have changed since then. And what a lot of facilities have done now is they created an internal travel agency. There still is the shortage. There still is. But they've cut the middleman out, if you will, or created the internal travel agency.

A recent survey that was done also still found that the shortage still remained, that students, excuse me, not students, but nurses were still being asked to work overtime on occasions, because it's difficult to try to fill those positions that were there. It also pointed out too that, again, verbal abuse and violence, physical violence on nurses, not only from patients, patients' family members, but also some of their own colleagues also made the workplace a very, or the work culture, a very challenging place in which to work.

Since I left the office presidency back in 2023, I've continued to travel across the country doing, at invited conferences and schools of nursing and healthcare facilities. And in having conversations with nurses, and also administrators, we still see that there still is a problem as far as with hiring nurses, to get them to stay. There are a lot of nurses, even new graduate nurses, who are leaving the bedside within six months to a year after graduation because of some of the working conditions that they report. Or they want to advance their education and go on to become advanced practice nurses, such as certified registered nurse anesthetist or nurse practitioners. But they do find working at the bedside being extremely challenging because they feel that in some cases they are not supported in a number of ways.

One of the things that what a lot of institutions have done, or healthcare facilities have done, as I mentioned, in addition to the internal travel agencies, they are implementing more and more of what we call nurse residency programs, pretty much what you're, similar to what a physician has done once he or she has graduated medical school. The same is happening with nursing programs as well. Instead of the traditionally new graduate would be precepted for about three months. And then they are left out on their own. Now, with the residency programs, it may be as long as a year to a year and a half that they are still working or doing a resident program that is similar to what their physician colleagues would experience as well.

Other things that are happening as well in order to deal with the burnout in the workplace is a lot of institutions are offering mental health or well-being programs for nurses of which they are taking advantage of, although some are seeking that advantage on their own, because the biggest fear is that if you have it on your report that you've gone to seek psych mental health care, that could be recorded on your license. And, therefore, or insurance, I guess I should say, and makes it difficult if you want to go and work somewhere else, people will begin to question that it could be something going on in your personal life, but still the fact that you perhaps sought psych mental health counseling could be perceived as something else going on. So, it makes you less of a candidate to perhaps be hired.

But, again, the nurses, and one other final thing before perhaps we address the second question, is that nurses also feel that as the patient assaults continue, or verbal assaults on them continue, even though an employer may have a zero tolerance notification, sometimes they are discouraged from filing charges against the patient or family member or even their colleagues, they are discouraged from that, and so they feel that as a result of that, you have the policy on the books, but the employer is discouraging you from doing that. They do not feel supported in that particular way, which also creates an air of do I feel as if this is a work culture where I can thrive, as opposed to perhaps going somewhere elsewhere where they feel that they are needed.

And as was mentioned, as far as like with remote work, you can't do remote nursing, or a little bit, of course, we are, in some cases, where you can do monitoring, and you can do hospital at home, but that is a new concept that is still broadening a little bit, but it does make it difficult. In the acute care setting, you need that nurse there 24/7 in order to provide the necessary care that is there.

VICE CHAIR JEFFERSON. Well, thank you very much for that response. And you touched on many different factors I think related to my second question, so it may be just a matter of prioritizing which ones you think are most important. So, if you think about the most important factors affecting whether or not people will choose to enter or remain in the field of nursing in the next few years, how would you prioritize some of the things that you may have already touched on?

DR. ERNEST GRANT. I have four very quick answers for you. The first one is nursing needs to appeal to both young men and women. And, in particularly, persons of color. It is vitally important, as we know, the minority population in the United States within the next five to ten years will be the majority. And I am a strong believer that nursing should be representative of the people that we care for. And so, we should have every opportunity that we can for underrepresented minorities to have the opportunity to become nurses and to see nurses. Right now, nursing is 80 percent female and white. And, again, as we know, the countries will become more diversified, that is something that we need to do.

The second thing is, first of all, people need to understand who it is and what it is that nurses do. When you mention nurse, most people automatically think, well, they work at the acute care hospital. They have no idea that nurses are everywhere. In industry, we're in aeromedical science, we do bench research. So, to have them see the opportunities that nurses may, or that you may have as a nurse. The second is that there need to be pathways starting middle school, I think, through high school, to promote nursing as a career, and allow partnership opportunities with technical or community colleges or universities that will expose students to that as well. I know at Duke, we are working on getting into that, the particular arena, and are having some good success with that.

Third, there need to be increased in funding opportunities for nursing faculty in clinical space. You can't generate nursing without nursing faculty. And the average age of nursing faculty is about 56 years of age. And at Duke, we admit new students every semester. So, three times a year, we are admitting roughly between 80 to 150 new students. But we've got to find the clinical space to, for them to learn, and also enough nursing faculty, qualified nursing faculty, in order to teach in that as well.

The fourth one is that employers should take steps to ensure the retention of staff with incentive programs as well, such as assisting with paying off student loans. I think the average nursing student may have an average student loan of about $56,000. So, again, for someone who is young, to already be saddled with that amount of a loan can be very challenging when you're wanting to buy a house, get married, have a family, et cetera, as well. Also, the employer should do other things as far as what are some things to enhance educational advancement or career placement in order to retain the nurses who are there, what are some opportunities that if I were a nurse who had only an associate degree, what are some things that an employer can do to assist me with getting my baccalaureate degree or master's, or vice versa, maybe flexibility in staffing that would allow that person to take courses perhaps either online or in person, but still being able to do that. Or perhaps providing scholarships and have them do a loan repayment over a two year period or so, are some of the things that could help to retain and ensure that there's a strong workforce coming through, because right now, the numbers are saying that by within the next 10 years, we're going to have an estimated shortage still of about a million to a million and a half nurses. So, that is a significant problem that is coming down the pike still.

VICE CHAIR JEFFERSON. Thank you so much for that. Now, I'm going to exercise my little bit of authority as a moderator, and I'm going to go right onto our second panelist, because I want to make sure that these panelists have the full amount of time to present their views. And then we'll take some questions. And then after this, you all can jump on the [inaudible].

Okay, I'm going to go on to our second panelist, Whitney Ferris-Hansen. Whitney is an owner and operator of J/W Farms and Ranch, a family-owned agricultural producer with livestock operations in Southern Oklahoma, and farmland in Eastern Colorado. She also serves as Chair of the Board of, the Board for Farm Credit in Southern Colorado. And my first question for you, Ms. Ferris-Hansen, is can you describe overall conditions for your business? For example, how do conditions today compare to a year ago? And have there been changes in the availability and cost of financing over that period of time?

WHITNEY FERRIS-HANSEN. Thank you, Vice Chairman, for that question. And thank you to the Board as a whole for your invitation to speak before you today. I'm truly humbled and honored to represent the American farmer and rancher in an industry I am so passionate about. I'm enthusiastic about this conversation and where it may lead us today, and the educational process to come on both sides of the table. As I begin my remarks to your question, Chairman Jefferson, Vice Chairman Jefferson, I'd like to elaborate a little further on my bio, and setting the stage for who I am and where I come from. One side of my family settled in Southern Oklahoma via covered wagon as they came through the immigration process after travels from Ireland. Their name changed from O'Ferris to Ferris. The other side of my family went by the name Huckelochubee [phonetic]. As he went through the Chickasaw Nation of Oklahoma Dawes Roll, his name became Eddie Gibson. I'm a fifth generation Oklahoma cattle rancher, married to a fourth generation Colorado row crop farmer. You need to be careful where you stop on your way to the mountains. You might be there 20 years later. My husband and I are blessed to be parents of two pretty amazing young men. Lair will be 15 in a couple of short weeks, and Lander's birthday quickly follows where he will be 12. They are the definition of farm raised boys. They work 10-hour days by the age 12, proficient in breeding season, 2:00 a.m. cabin duties, planting schedules, and harvest windows. I say all this to set the stage that the American agriculture industry is not just a job, it's not a weekend hobby for those of us with boots on the ground daily. It's not only our livelihood. It is our life's work, and the weight of carrying those generations that came before us.

As I start to envision what passing this onto the sixth generation in Lair and Lander will look like, the desire to pass down their inherit legacy, but also the basic wants and hope that they will be able to afford this lifestyle when the time comes. As these thoughts become more real with every day, there are two major things right now that keep me up at night, two major things that weren't on my radar a short 24 months ago, and that is once in a generation interest rates, combined with an instability in our current commodity prices. It has a stranglehold on the American agriculturalist right now, which leads to a stranglehold on all of rural America.

In being asked what's the overall condition of our business, today I'd sum it up with one word, that's questionable. In the last 18 months, Jeremy and I have seen 11 increases in our operational line of credit, totaling a change in 500 basis points. That's a 65 percent increase in our ability to borrow operational money just for day-to-day businesses. That does not include the change in variable rate land or equipment loans, or the actual increase in goods and inputs we are buying such as fertilizer, chemical, fuel, labor, freight, parts, insurance, and the list could go on. Even if commodity prices were in stable place, interest rates alone make profitability questionable right now. An increase in rates is always expected and planned for. But the speed at which these increases happened could not be risk managed. We could not afford contract grain fast enough to hedge these interest rates.

Today, this is my story to share, but I want you to know that any production agriculturalist could sit in this chair and tell you the same story today. Instability in commodity prices is not commodity specific at this time. No farmer is immune from that current perfect storm. In the last 12 months alone, we have seen a 32 percent drop in corn prices. For every bushel of corn we stored, we have seen a $2 drop in price. All of these factors I have mentioned have had a direct impact on how we currently are doing business. More in house maintenance, more in house repairs, less outsourcing of all goods and services, no new purchases, no new hires. We're in a triage mode.

One way we're able to hedge some of this risk and hopefully see the light at the end of the tunnel is our relationship with our banking partner. I'm a firm believer in the farm credit system and its place for being a source of educated reliable lending for rural America as well as our local and community banks who stand in support, who understand and support the business we are in. Simply, the big banks would not touch us right now.

I believe that every farmer and rancher right now is struggling with the question of money into production costs or money into interest rates. There is no right answer here, only a very hard one. But the fact is, we can't farm without either.

VICE CHAIR JEFFERSON. Thank you very much. I have a follow up question. And I think it fits very well with what you've already told us. And could you tell us what notable changes you've seen in the economic conditions in rural communities, perhaps more generally, where you live and work?

WHITNEY FERRIS-HANSEN. Perfect. Thank you again. As I began to wrap my thoughts around rural America and the story I wanted to share with you about my community, you always want to give you the Mayberry of what it looks like, right, the version where my kids are going to school with the same classmates they've had since preschool, they'll know what lifelong friendships look like, where their dads went to the same school and the talk of that next generation already reviving the state football championship has already begun. It's where grandparents live next door and right around the corner, and the cookie jar is always full. It's where two hawks on a Sunday morning means papa is ready to go to Sunday school. And the most frustrating part of getting to town on any given day is whose cows are out, or if you got stuck behind the neighbor moving combines. It is an amazing place to raise children and a family, and I wouldn't trade it.

But the other version, when we peek behind the curtain, is some pretty sobering truths right now. Where Main Street stands mostly empty with dilapidated buildings, where the current generation only has dreams and visions of how quickly they can get out, or when a new doctor comes to visit our small eight bed hospital, we're quickly checked off his or her list because our closest Walmart is in another state, and Target is two and a half hours in the opposite direction. Where we have a failing school system that qualifies for 100% free lunches across the board. And dilapidated and outdated buildings and facilities, we have a crippling teacher shortage at the moment. And for the first time in my 20 years of living there, we have a homeless population sleeping on the streets. One of two things. They're either trying to make their way to Denver and the Front Range area, or they have came back because they have figured out that the assistant lines in our county are not as long, and they stay with us for a while.

In the vast majority of our small rural communities across our nation, agriculture is not only the leading industry, in most cases it is the only industry. Where farmers and ranchers are struggling, the bankers, contractors, mechanics, food retailers, are all struggling too. You can see the health of a small town by its main street or its school system, but more simply at the surface, look at the turnover at the local John Deere dealership or Chevy dealership.

As I stated before, the stranglehold happening across rural agriculture in America can be seen enveloped all across its community. Like many industries, we're facing a labor shortage. Not because of pay or benefits, in most cases, but because the hours this lifestyle demands. When you have a 40-hour window before your predicted snowstorm comes, and the corn is still standing in the field, that means you work 48 hours until you're shut down by said blizzard. It's hot, dirty, physical, labor intensive, not remote, not flexible, and not 9:00 to 5:00. And that, I believe, has the cause of our labor shortage right now.

The American agriculturalist is continually being asked to do more with less. Acres continue to be removed from production, yet we lead the world. Less than 800,000 cattle ranchers in the United States produce 18 percent of the world's beef on less than 8 percent of the world's cattle population. That's a pretty good return. The American agriculturalists are some of the most efficient and forward-thinking cohorts we have. It comes from generations of teaching, learning, grit, and just plain hard headedness.

As quickly as our main street has changed, the demographic and who is buying real estate has changed. I'm blessed to call two places home: Eastern Colorado and Southern Oklahoma, a gift of roots and wings. In Eastern Colorado, we've seen a major shift in the volume of land being purchased from outside interest. Private equity land trust and buying groups are making it difficult for locals to buy tracks of land. They come in with a set number, willing to push that number by the whole lot at one time and leave. Good or bad, I don't have an answer. Every coin has two sides. Have I lost tracks to said buying groups? Absolutely, I have. They have a different business model, but it's, we need to learn as locally to adapt if we want to keep up with that. In Southern Oklahoma, we've seen an influx of North Texas money making its way across the river post pandemic. This one has a personal business ramification. I've had to rework my whole business plan, and I've personally lost over 900 acres that I was leasing that now belongs to out of state purchases. That was one third of my operational cost at the time. There are now million-dollar homes with high fences all the way around them. The type of fence designed to keep wild game in. These properties, once beautiful hayfields and cattle operations, are now weakened recreation spots for the Dallas-Fort Worth area. It has rapidly changed the footprint of agriculture in that area.

WHITNEY FERRIS-HANSEN. Those adjectives I spoke about before for the generational agriculturalist, I tend to lean to the hardheaded side of things. Jeremy and I had the opportunity to purchase a small neighboring house a couple of years ago and took the mentality if you can't beat them, join them. We now use that as a rental to those Texas deer hunters and fishermen that are coming up in a way of diversifying our business. I'd like to leave you with one thought. The current misconception of what is perceived large balance sheet, multigenerational farms and ranchers, do not need the assistance and protection being afforded to other demographics. I believe that's a wrong way of thinking. Multigenerational agriculturalists mean a stable food supply. It means they know what they're doing. While there's always a need for young, beginning nation small farmers within our industry, consistency and stability in our food supply matters to all of us on a letter of national security. Thank you.

VICE CHAIR JEFFERSON. Thank you very much. And we'll turn now to our final panelist, Cara Walton. Cara is the Director, is a director at Harbour Results based in Southfield, Michigan. She leads the company's manufacturing intelligence business, which collects and analyzes millions of data points from thousands of manufacturing companies in North America. Harbour Results collects data from more than 600 privately held small and medium sized manufacturers each year. Cara and the team at Harbour Results utilizes these data and information to help small to medium sized manufacturers improve their competitiveness in the marketplace. Cara also studies economic business trade and tariff trends impacting the manufacturing industry. And she consults with clients on their business impacts. My first question for you is so since you last talked to us in late 2022, tell us about how conditions have changed at small and medium sized manufacturing businesses you work with. For example, what have been the effects of tighter financing conditions and how they, and how have they responded?

CARA WALTON. Absolutely. Thank you, Vice Chair Jefferson and the whole Board. First off, similar to you we have a lot of data. And I also have a lot of charts. So, I did not print any out, but I am a big fan of charts. As you said, we are a small and medium, we work with small and medium sized manufacturers. Just for reference, those are typically companies less than 500 million dollars. So, that's kind of what we mean by small and medium sized. The last time we did an analysis of our database, it represents about 30 billion dollars in total output. Generally, these are privately held businesses, often family owned, second and third generation. Just two other quick clarifications, they're typically not unionized. Some exceptions to that. But generally speaking, these are non-unionized places. And they also are not consumer facing. So, they're typically supplying either to the large publicly traded company that we know, or in many cases, supplying to another company who is then supplying to the large publicly traded company we know. So, to start off, to answer the first portion of what happened in 2022 and kind of how it's changed to today, back when I was here last, we talked about where the two pressing concerns to manufacturers being labor, or frankly the lack of access to labor. And then the ability for them to make money. From a labor perspective, they couldn't find people. And even people they could find, they definitely couldn't keep. They also had an average aging owner, an aging workforce, a lack of attraction to the market. There's not really much remote work if you're trying to make pieces and parts. And then they had a lot of challenges in the labor market that were costing them a lot of money. For example, they had a lot of wage pressure. That one is still around today, which we'll talk about. They also had a lot of transactional waste. Every time they hired someone new, that person showed up for a day or a week, and then left. Their HR department had to go find someone new again, which was costing them a lot of money. They also had high recruiting costs and high turnover. The other thing that we chatted about in 2022 was this oversimplified way of saying our ability to make money. What we saw that, and are still seeing today, is that manufacturers are improving their operational efficiency, so they're doing more within their same four walls in many cases. But their profitability is not following suit. So, they're doing more, they're doing better, but they're not making any more money. The reason for that was partially the labor challenges that we just chatted about. But additionally, this overall higher cost of doing business. That's everything from even interest rates on working capital back then, where they were still struggling with in some cases before the tighter financing conditions that we'll talk about. High energy costs, high transportation costs, as Derrick brought up, many different things that were impacting these people. High healthcare costs, temp agency costs going up. Poor use of PPP NERC funding was a big issue in 2022. And that money had dried up, so they didn't necessarily use that accordingly. And then there was no more of it. And the last thing that I'll tell you, and this is kind of hard to monetize, is they were struggling with what we call increased chaos. There was a lot of wasted time. They either had someone whose full-time job might be just trying to figure out if their material is going to show up, or if their truck is going to leave when it's supposed to leave, so they don't shut down the next person they're supplying to. I bring this up to you to explain what we see today. Today, the labor problem is still occurring, but less. What I would tell you is that it is still a challenge to find skilled labor, but we are able to find some people for more of the general labor. And we are still able to attract in some cases. Our survey we did in the first quarter, 40 percent of our manufacturers told us they're holding steady in hiring, so they're not planning on hiring anyone additional in 2024. 52 percent said that they're planning on hiring, but my caveat there is that's predominantly in filling of existing positions. So, that is where your skilled labor shortage comes into play. They cannot find people in these skilled labor roles. There are kind of two reasons for that. One is still this aging workforce. People don't want to come into manufacturing if they're younger, generally speaking, contrary to my best efforts, and the best efforts of I know many organizations out there. And the other challenge that we're seeing is the competition on two ends. One of it is competition for general labor from other industries. For example, many manufacturers that have Amazon warehouses down the road that offer signing bonuses. My manufacturers can't do that in many cases. The other aspect, there was a lot of labor negotiations last year. Even though these are non-unionized jobs, their wages have gone up, or their wage pressure has increased due to those union negotiations. What they've seen in that, and this is just an interesting anecdote for you, I spoke with many manufacturers in preparing for this. One of them told me that the number one thing he heard in employee reviews last year was, boss, my wage doesn't keep up with what I'm having to pay at home. They're relying on many of the services that my cohort on the other side of the table talked about. The challenges, this is a very well-run second-generation manufacturer that I've had the pleasure of going into. They don't have the flexibility to increase their wages any further. So, they're struggling in terms of how to keep these people around in many cases. The other challenge that they're meeting with today, and this is where the tighter financing conditions come into play, is still this ability to make money. The challenge is the same, but some of the things are different than they were two years ago. These businesses are still having consistent operational improvement. They're still doing very well. But in most cases, their businesses are asking them to do the same thing for same or in many cases lower prices, so their customers are saying, yep, I need the same high-quality part I needed two years ago, but you've got to do it for less. With all the other pressures we just talked about, it's very challenging for them to do this. What I would tell you from a profitability perspective is that in 2022, these manufacturers, on average, made 5.3 percent profit. Our top performers, who are truly the best of the best businesses, on average, were making 9.2 percent. If you compare that to other sectors, that's already a bit of a lower number compared to some other industries and profitability expectations. Unfortunately, I don't have formal 2023 data yet. That survey goes live here in a couple weeks. But nonetheless, what our manufacturers told us in the first quarter is that they expect their profitability to be about 7.6 percent. Positive sign, but what I would also tell you is that generally when manufacturers forecast profitability, they tend to be a little bit optimistic. So, realistically, what we see in the data is that profitability would likely be down or flat in 2023 compared to 2022. Part of the reason for that is the supply and demand imbalance, which I believe we'll talk about in the second question. But the other part of that is tighter financing conditions. To answer why that's such an impact to them, I want to give you a couple quick examples. Manufacturers rely on financing for many reasons, many of which you guys probably already know. But the total cost to invest is very high. And the return on that investment is very long and getting longer. I spoke with many manufacturers, again, to prepare, one of which financed a 3.5 million dollar purchase with their bank in order to invest in a single new press. So, this is one new piece of machinery in the associated infrastructure necessary for them to run it safely. Investing in that press, they now have a bank that's asking them questions, because frankly the cost of money is higher. And demand is going down a bit. So, that return on investment is getting substantially longer. I have another manufacturer who bought a 1.5 million dollar machine at a 7.25 percent interest rate. Three years ago, that interest rate would have been 3 percent. You guys can do the math better and far faster than I can on the impact of that financially. But that alone impacted his finances, not to mention when the R&D tax credit was changed, he had an additional $300,000 tax payment that he was not previously forecasting. The reason why I bring this to your attention is because now, going into 2024, his planned investment is less than half a million dollars. Based off the data that we look at, that's the bare minimum. You have to invest nearly that amount of money for a business of his size, just for new software. So, what this tells me, and this is not a specific situation for them, is that these businesses are choosing not to invest any further because they can't afford it. They also rely on financing for other reasons beyond just these capital expenditures. There's a big challenge with lack of upfront payment. Businesses are often waiting days, weeks, months, and in some cases years, to get paid for work they had already completed, already bought material for, and already paid their people for. They need these lines to pay those bills. We also have a challenge of supplier consolidation.

A lot of suppliers have already started becoming consolidated. And others are planning to. The reason why I bring this to your attention when I talk about financing conditions is because many suppliers offer credit lines. So, you can buy material and have the flexibility to then get more of it and pay off as you go. As these suppliers consolidate, the credit lines that the small and medium sized manufacturers I work with also consolidate. So, my parting shot to you on the finance piece of it, and then I'll move on, is that as we talked about a little bit at the start, succession planning and aging owners is an ongoing challenge. But similar to a comment that I heard before, you have a lot of really wonderful second and third generation leaders and young leaders in the manufacturing industry, myself included, that have never run a business with interest rates like this, or with this level of heights. It's uncharted territory for us, and we don't know how to run businesses this way, with all the other challenges we're already facing.

VICE CHAIR JEFFERSON. Thank you for that. And so you mentioned supply and demand imbalances. And I'm interested to know to what extent they are continuing to impact the automotive and other manufacturing sectors. And are supply chains more resilient than they were before the pandemic?

CARA WALTON. So, I think the biggest challenge is still the volatility, or the ability to consistently match supply and demand. It's an age-old challenge that I know you all are very familiar with. But what I would tell you, and the way that a manufacturer put it to me, is he said, look, historically, things that happened over the course of three to five years are now happening over the course of three to five months, or less than that. So, for them, and it struck me, that's a very good way to put that, so I wanted to bring it to your attention. To answer the question in full, I'll kind of start on the demand side of the equation. And then I'll try to address the supply side. From a demand perspective, I think one thing that often goes unnoticed for small and medium sized manufacturers is that their agreements with their customers are fixed. So, if a customer chooses to decline the amount of demand that they want, or certain volumes, or if your lead times change, or if your materials go up, all things that are happening very often in today's supply chain, that small manufacturer is the one that's taking on that additional risk, because their agreement with their customer is fixed. Not always 12-year agreements, to your point, Dawn, but long agreements in many cases that they consistently are committed to. The other challenge that they have is that most of the incentives that are coming out of purchasing departments at these businesses that they supply to are only pricing based. So, these manufacturers are feeling forced to drop prices lower than even contribution margin, in some cases, just to get business in the door to cover some of their costs. So, it's continuing to challenge them. The other thing that I would tell you is that from a supply side, or excuse me, supply is still not matching that demand, so when we talk more about a demand side of the equation, inventories continue to rise. So, you brought up the automotive industry. We're starting to see inventories rise in the automotive industry. But even before that, we saw inventories rise in what I'm going to call more discretionary spending industries. So, boat, RV, household appliances, people aren't buying new blenders anymore, things of that nature. It's impactful on the consumer side. But it's also very impactful to manufacturers I work with because they are facing consistent calls from their customers saying your volumes are cut. And they have no forecasted knowledge to do that. One example that I'll give you, I have a colleague who was sitting in, oh, excuse me, I have a colleague that was in South Dakota who was looking at snowmobiles. So, for those of you who have been in South Dakota in February, there's usually snow on the ground. He sent me a photo. There was no snow on the ground, which was the first thing of interest. The second thing of interest was there were crates stacked three and four high with brand new snowmobiles sitting in them. Our assumption is that those are going to sit there until next season. So, that tells me a couple things. First off, that tells me that there's high inventory, so these snowmobile manufacturers, if they haven't already, are cutting demand for their customers. But additionally, what it's showing me is that there's broader concerns in terms of how we're selling these things from a discretionary spending perspective. So, that continues to be a challenge that we're watching very closely. From a supply side, to answer the other half of that question, one of the big things that we're seeing is market consolidation. And I talked about this a little bit on the financing side and credit. That is still an impact. But the other challenge here is that as we see suppliers consolidate, the manufacturer that I work with, that small and medium sized manufacturer, is the smallest person in the supply chain. So, what they're facing is they don't have the same leverage they used to have. They can't bulk by in order to manage material cost. They can't find other ways to concern their costs in any capacity. At the end of the day, they don't have any leverage at all. The other challenge that they're facing on the supply side is globalization of supply chains. You asked about supply chain resiliency. There is positive aspects of the localization of a supply chain. Don't misunderstand me. We're seeing many resident steel suppliers who are minimizing their offshore buying. Positive sign. It's good for the supply chain resiliency. Means there's more capability to make things here. We like that as North American manufacturers. But what it also means is that these suppliers have less incentive to compete from a pricing perspective. They're no longer competing with Europe. They're no longer competing with Asia. So, their prices are getting higher. So, despite some of the inflationary costs coming down, which I know is obviously something that you guys care very much about, it's not necessarily impacting a lot of the material challenges that these manufacturers are facing. I'll leave you with one more example, and then I'll wrap up the answer to this question as well. I work with a manufacturer that does a lot in aluminum. So, about 50 percent of his tools are made out of aluminum. There's an additive in aluminum that comes out of the Ukraine. For obvious reasons, it has been very challenging to get that additive out of Ukraine. For reference, aluminum, or material cost in general, makes up anywhere between 30 and 60 percent of the total cost of the tool that he would make. So, even a 1 or 2 percent point increase in the cost of aluminum, because you can't get that additive, has astronomical negative impacts to the already low 5.3 percent margin that they're barely able to eek out in certain points in time. That's just one example, again, but there's a lot of challenges in the supply chain. If I were to generalize on behalf of small and medium sized manufacturers, a large feat, but I'll do my best based off the data we have in our database, they've faced countless challenges. Similar to the conversations about others around this table, I won't go into all of them. I respect your time too much to do that. But what I will tell you is that about a third of the manufacturing base is struggling, very much, and the lower interest rates and lower cost of money that they were able to have for a period of time from 2019 to 2021 is obviously no longer there, as you guys know. And what that's doing is that's forcing them to make extremely challenging decisions. Will they go out of business? Will they sell and consolidate into a larger entity? Do they have succession plans in place to be able to hand it off to someone else? Do their children want it? All of these things are massive challenges in this marketplace. And unfortunately as interest rates have continued rising, or staying the same, these manufacturers have paid the toll, no pun intended, in the automotive industry. But nonetheless, they have paid the toll, while simultaneously not benefiting from any decreased costs. So, they are facing this stranglehold, I think, as you put it, Whitney, from both sides of the equation. And it's a concern we consistently have.

VICE CHAIR JEFFERSON. Thank you very much. I want to thank all of our panelists for their very compelling presentations. And I want to open the floor for questions. Governor Cook, and then Governor Waller. Governor Cook first.

GOVERNOR COOK. So, do we have to do Panel 2, or can we get questions for anybody?

VICE CHAIR JEFFERSON. So, questions to anybody from Panel, for Panel 2.

GOVERNOR COOK. Okay.

GOVERNOR WALLER. I have two. Okay. [Laughter]

VICE CHAIR JEFFERSON. But your question is going to be for these panel? No?

GOVERNOR COOK. I thought it was open. I thought it was open.

VICE CHAIR JEFFERSON. We have to give Panel 2 a shot. Yes, yes.

GOVERNOR WALLER. So, my question is more kind of generic, and something we have, are dealing with here. But all the industries you represent, the question I have, do you see immigration having any impact on labor supply for certainly agriculture is one where historically this has been a factor of manufacturing. And I'm not exactly sure on nursing, but I can certainly see, depending on what skill level you want to pick, or accreditation practices, that this can all be something that helps in these industries.

CARA WALTON. Yeah, from our perspective, I did talk to a couple associations, because I thought that this might come up as a question to your point, about 60 percent of the manufacturers that we work with in many of our associations don't utilize any temp or full time Visa labor in any capacity. So, the immigration policies haven't had massive impacts on them. Truthfully, what we've been told by many of our manufacturers is that immigration labor will go elsewhere first. So, it will go to other warehousing positions and things of that nature. But unfortunately, working in a manufacturing facility, although it is extremely safe in many cases today, is not the first place that someone would choose to go, versus going to just work in a warehouse or oftentimes in the food service space. So, there's not a big impact of immigration on our force.

WHITNEY FERRIS-HANSEN. In my particular branch of agriculture, we don't see a huge, we don't utilize immigration workers or Visa workers. When you think of the agricultural industry, you're thinking more of that produce specific hand-picked, less mechanical labor. So, we don't see that particularly. We are seeing a rise in immigrants coming to our rural community. Not necessarily that it’s hey Burlington’s a great place to live, because we have such a wonderful climate, and the wind never blows, so we're going there. It's more they're coming to establish family members in doing that. So, to answer my question directly, to my business, no, I'm not seeing that impact.

ERNEST GRANT. That's a really great question. In healthcare, we are seeing that a lot of healthcare facilities are going to foreign countries to import registered nurses, particularly the Philippines is pretty much the number one importer of registered nurses, and in a way, like during COVID, what you were seeing was you're robbing Peter to pay Paul, because nurses, you know, it was happening globally, so, but that still is a phenomenon that is still going on that they are, in this case, branching out even further from the Philippines to other nations as well, and bringing those nurses in to work. That is helping to alleviate the shortage a little bit. But there's still sort of, in some cases, a language barrier as well that you have to get through that period of time.

VICE CHAIR JEFFERSON. I'm going to, Governor Bowman, do you have a question for the second panel?

GOVERNOR BOWMAN. Great. Well, thank you. Cara, you mentioned the geopolitical conflict, conflicts abroad having some impact on costs, especially with aluminum. If there are other areas where you see that, that would be really helpful. And then I'd also like, Whitney, if you might give some insight into how shifting agreements for providing different commodities in different countries, and how demand for U.S. agriculture products, if you're aware of that, or how that's impacting your business is influencing that as well.

CARA WALTON. So, to start, yes, there are absolutely other areas where there are other components that you can't get out of certain regions. One of the other things that we're seeing, that I think is important from a geopolitical factor, and I'm happy to give you a list of the components we can't get if you want one we have those. But one of the big things from a geopolitical perspective that we're seeing is, as it said in my bio, I look a lot at the tariff and trade side of things as well. From a tariff and trade perspective, we're not allowing, for good reason in many cases, a lot of products to come in from China and other areas of Asia. Good news, in some cases, because it's pushing manufacturing to the U.S. and to North America. One of the big challenges we're seeing right now, and many of our manufacturers are competing with, is the foreign direct investment in Mexico. So, Asia is having, and Europe, frankly, is investing massive amounts of money in Mexico. I don't know the numbers. I can find them. I'm confident that you guys can find them as well. But what we're seeing in that is that now that it's sitting in Mexico, and manufacturing is occurring there, you have more direct competition from the U.S. and Canadian counterparts, because it's far cheaper, in many cases it's cheaper labor, or just ability to find labor in general in the Mexican market versus the U.S. one. And now you have less concerns from the supply chain resiliency that we talked about. So, you're less concerned about getting something across the Mexico border than you are about it being caught up in a port in Los Angeles, for example. So, that's one of the big geopolitical factors we're seeing.

WHITNEY FERRIS-HANSEN. To answer your question, Governor Bowman, and I'm not going to go out and try to understand trade at this high level, and what implications that have, that has. I'll tell you directly the two stories that I have. The current administration recently bought, I believe it was 30 million metric tons of soybeans out of the Brazilian market, as we're sitting on almost triple that in the United States. That's one of the commodities that has crashed recently. And personally, we have a very small niche market of an organic wheat. And that goes to the mill there in Denver for bread products. Our commodity broker, there's recently been purchase of organic wheat out of Ukraine, the United States has bought two years' worth of organic wheat out of Ukraine, and we can't move our organic wheat. So, those are the two personal stories. Again, trade level of above my head that I'm not even going to attempt to understand, but that's a personal ramification of what's happening in our business. Thank you for that question.

VICE CHAIR JEFFERSON. Governor Cook, the floor is open. You can go.

GOVERNOR COOK. I'll start with this parallel. So, in our travels, in my travels across the country, listening to various people represent various parts of the economy, one of the biggest features of the new economy that comes up is the nursing shortage. And one visit to West Virginia displayed this unusual partnership between a community college and the nursing shortage addressing the nursing shortage in this big hospital system. And it seemed unusual because they didn't see a shortage really. But the other parts of the state saw a shortage, because the students from the community college were going elsewhere. So, I'm wondering, who's addressing the nursing shortage? If places like Duke have constraints like clinical space, who is addressing that? Is it community colleges, or what's happening?

ERNEST GRANT. It's all the learning environments. The community colleges, the universities, as well. One of the things we're doing at Duke, for our fourth semester students, Duke University is offering them pretty much a job fair where they choose where they would like to work. They're guaranteed a job at Duke. So, they're finishing their last semester as part of their clinicals in the place where they're going to work. So, they know that they have a guaranteed job. One of the other things we're doing is also going out into the rural areas. Our advanced practice nurses, the nurse practitioners, we're going to rural areas. And you would think it's 2024, believe it or not, there are three counties in the State of North Carolina where all the healthcare is provided by nurses and nurse practitioners, excuse me, nurse practitioners and PAs. The nearest hospital is like 80 miles away for some of them. So, we are supplying our students there in the hopes that they will stay there in those critical access areas as well. So, it's all of us working together in realizing that we need to form some sort of consortium or collaboration in order to help to meet those critical access needs that we're seeing. And it's that way across the country as well in other parts. So, part of that is also just recognizing that, again, those clinical resources that I talked about, if you give them the opportunity to train in those critical access hospitals, or those rural hospitals, they can, in turn, offer those students a job, and be able to, if they can keep them there for at least two years, and then as more and more come in, it's a great way to maintain that balance.

VICE CHAIR JEFFERSON. Yeah, please. So, this is the last question before we turn it over to the Chair.

GOVERNOR COOK. Okay, Svenja. Okay, so you knew this was coming. I'll go to the website. I go to the website. So, I don't know if I'll find these in the data, but I'd love to know about the supply side and the demand side with respect to AI. So, to what extent are potential employees putting on their resumes that they have AI skills, whether generative or not, and to what extent are employers advertising this as a need in their postings. I have another question about your job tracker series that leads the Atlanta Fed job trackers series by about six months. And I want to know, over what period have you observed that relationship? Is that relationship durable?

VICE CHAIR JEFFERSON. May I ask, before you respond, may I ask that you keep your answer brief? Because we're sort of at time. And I'm going to encourage you to follow up with Governor Cook offline. Thank you.

SVENJA GUDELL. Governor Cook, let me actually answer your job postings, or wage tracker answer offline. I'll get to the data on that one. In terms of AI, I'll start on the employer side. We have seen, particularly for generative AI, coming off of a tiny, tiny base, but really strong growth in that. And interestingly enough, we've seen that employers of all, of all sectors, are starting to ask for generative AI related skills. So, it's not just, you know, the data scientist or the mathematician or the machine learning engineer. It's the marketer that's also being asked to be able to apply these tools. So, we think of it in terms of the creators of gen AI and the users of gen AI. So, we've seen that increase. And we have yet to dig into the full data, to be able to get a sense of how, how many skills, or AI related skills, are job seekers or workers in general listing on their, on their resumes. But anecdotally, we've seen certainly a pick up in those types of skills as well, to make yourself more marketable. And it is the hot ticket in town, if you look at wage growth, it is off the charts for people that have gen AI skills, as people, you know, particularly large tech companies are trying to hire experts in those fields. Thank you.

VICE CHAIR JEFFERSON. Thank you so much.

CHAIR POWELL. I'll just add my thanks. Thanks to each and all of you. This is beyond valuable for us. And I'm certain that I learned something from each one of you. The work that you do, there is no higher calling than the work that you do, those of you around this table, and thank you for that. And thanks for being here today. Thank you.