

Interviewer:

There we go. All right, try this again. Good morning, everybody.

Audience:

Morning.

Interviewer:

Very excited to be here today. I have the honor of moderating and introducing Neel Kashkari from the Minnesota Federal Reserve. Just an incredible opportunity. I had a chance to sit into a round table conversation with Neel and the team yesterday. From the little I understood, it was absolutely fascinating.

Just a real quick bio on Neel before we get going. A lot of Midwestern roots. Grew up in Akron, I believe a LeBron James rival high school, if I remember correctly. Went to the University of Illinois with a bachelor of science in mechanical engineering and also a master's of science in mechanical engineering. First job out of school, very different path than probably the traditional Federal Reserve, actually was in California as an aeronautical engineer, aerospace engineer, working on NASA satellites. So he joins Brad King as the second rocket scientist in the room, which is very interesting.

From there, went back to school in the Ivy League at Penn for an MBA and then eventually to Goldman Sachs out in San Francisco, leading some of the investment activities out there in the software IT space, right in the shadows of Silicon Valley. Joined the Treasury late 2007, 2008, President Bush, President Obama, and actually oversaw the Troubled Asset Relief Program, the banking bailout, all the activities. So what we're seeing today, Neel is perfectly primed for with the experience that you had back in 2008, 2009.

In 2014, 2,929,313 Californians tried to make Neel their governor. If you put that in perspective, if you were running in Michigan, you would've won by a landslide by over 500,000 votes. So we do not have to normalize here in the UP. 2015, named the president and CEO of the Ninth District based out of Minnesota. I think one thing we can all appreciate as Neel drew those district lines, he kicked the lower state down into a different district, so just the UP is part of this conversation.

I'm going to kick it to Neel. He's got obviously some opening remarks and is going to walk us through also a survey. Everybody on their table, it's up on the screen as well, has this sheet. This is an interactive opportunity that Neel's going to walk us through. So if everybody could take their phone out for a second and send a text to 22333 and then please type in the word Minneapolis and hit send. What we're going to ask you to do is stay in that text mode so that we can do some interactive Q&A and get some survey response back from the crowd. Does anybody have it up? Is it working okay? Hearing yes. Good. Well, thank you very much. Neel, I'll kick it over to you.

Neel Kashkari:

Well, thank you. Good morning, everyone. It's great to be with you. Thank you for the introduction. Thanks for having me. Let me just spend a couple minutes and tell you why I'm here and what the Minneapolis Fed does. Then we'll get to the questions that we have for you, and then we'll have the discussion.

The Minneapolis Fed is part of the Federal Reserve system, which is our nation central bank. We were created by the United States Congress in 1913. Essentially, our job is to try to manage the ups and downs of the US economy. Congress did something unique in 1913. They didn't want the central bank

simply housed in the nation's capital. They wanted it spread out around the country, so they created 12 independent Federal Reserve banks, the ninth of which is the Minneapolis Fed. Our charge is to represent the Ninth Federal Reserve District, which is a big part of our country. It's Minnesota, North and South Dakota, Montana, Northwestern Wisconsin, and the UP.

A big part of our jobs are to keep our fingers on the pulse of what's happening in our regional economy. I do that in part by... I try to come to the UP once a year. My colleagues visit. We've got advisory council members who are here, I see some, who give us input on what's happening in our regional economy. Then I go back to Washington, DC, every six weeks, and we set interest rates for the nation in the Federal Open Market Committee meetings. Part of what I'm doing in those meetings is talking about what's happening here in our regional economy. Now, we cannot set a different interest rate for the UP and for California and for New York. We all use the same dollar, so it's one monetary policy for the nation. But we want to make sure that this region has a voice in that deliberative process so we can pick the right monetary policy for the nation as a whole.

Now, a lot of times the economic data that we're getting, whether it's on the labor force, whether it's on inflation, whether it's on business optimism, on supply chains, a lot of times that data is sending us conflicting signals. For example, a year ago, if you looked at the measure of GDP, gross domestic product, the US economy appeared to have two negative quarters in a row of GDP growth, which traditionally says the economy's in a recession. But at the same time last year, the economy was creating hundreds of thousands of jobs month over month over month. Usually, when the economy is in recession, the economy is shedding jobs, not adding jobs. So that was an example where the data was very mixed. Are we in a recession, or are we growing?

Well, coming out and doing visits like this help us to make sense of the mixed economic signals that we're seeing. Last year, the GDP numbers were negative. But when I would meet with small and big businesses and labor groups all around the region, the overwhelming feedback I got was this is a gang-buster's labor market, so that did not signal that we were in a recession. So that helped us make sense of the mixed signals. So visits like this today are great for me to get a sense from you on what's happening here in the UP, what's happening in the labor market, what's happening with inflation, what's happening with supply chains so that I can try to get a sense of where's the economy going.

Now, a couple more minutes before we turn to your questions. Coming out of the pandemic, obviously, we have very high inflation, and it's the Federal Reserve's job to adjust interest rates to get inflation back down to 2%, our target. Now, Congress has given us what's called a dual mandate. On the one hand, we want stable prices of 2% inflation. On the other hand, we want maximum employment, as many Americans gainfully employed and contributing to our economy. Usually, we think of these two things as sides of a seesaw. When the economy gets really strong, the unemployment rate drops, wages go up, and then that leads to inflation. Then traditionally we would raise interest rates to slow down the economy and even out inflation in the labor market.

Well, the Federal Reserve has raised interest rates by five percentage points in the last year. That's rapid, rapid increases. First thing that does is it pushes mortgage rates up which taps the brakes on the single-family housing market. But remarkably, the other side of the seesaw has maintained a lot of strength. The national unemployment rate is still around a record low level of around 3.4%. When I visit with businesses all around our region, large and small, one of the top issues they continue to express is they can't find the workers that they need. Wage growth seems like it has softened somewhat. It's not quite as frothy as it was nine months ago, but by most measures, the job market still seems very strong. Inflation has come down, but it's still well above our 2% target. So I'm going to ask you a bunch of questions about what's happening in the job market, what's happening in inflation, what's your outlook

because we're trying to get a sense of, have we done enough to actually bring inflation back down to our 2% mark, or do we have to do more with monetary policy to bring the economy back into balance?

The last thing I'll say, as you well know, a couple months ago, some banks, especially on the West Coast, got into trouble, Silicon Valley Bank being the most visible example of that and required the government to step in to stabilize them and effectively bail them out and take them over. These kind of credit issues in the banking sector can traditionally on their own be a source of slowing of the economy. Because banks get nervous, they tend to tighten their belts. They become a little stingier in who they lend money to. Businesses get nervous saying, "Hey, I'm not sure I want to take out that additional loan." If everybody gets nervous at the same time, everybody pulls back at the same time, that by itself can slow the economy and bring inflation down. So that's something that we're trying to get a sense of: How much of an imprint are those banking stresses having on the broader economy? If they have more of an imprint, then we have to do relatively less with our monetary policy tools. If they have less of an imprint, then the responsibility really is on the Federal Reserve to get inflation back down.

I'm going to ask you some questions now. Want to just get a sense of what you all are seeing in your part of the economy. Then we will talk about that and use that as the basis for our discussion that we're going to have. Then we're going to open it up to all of you to hear from you. First question, I can't see it, year-to-date, how have companies' sales performed compared with the same period last year? Much weaker all the way to much stronger. I'm going to stand up. How have sales performed compared with last year? Looks like we tilt towards little change to somewhat stronger than the same period last year. Okay, great.

Next question, how have profits performed compared with last year? Somewhat weaker. Actually, don't go to the next question. This is interesting because obviously, generally speaking, costs have been up across the economy. Labor costs have been up. Materials costs have been up. Other inputs you need for your business have been up. So I would not have been surprised to see profits stressed. At the same time, what's curious about this environment that we're in, on average, corporate profits are very high. So it's a very interesting dynamic we have that the inflation that we've been experiencing has not actually been dominated by wage growth. Wage growth has been a lagging indicator of inflation rather than the big driver of inflation, and that's why profits have been robust even though inflation has been high.

Next question. Your demand for labor, are you cutting workers all the way through continuing to hire workers right now? So the bulk is hiring. Still a lot of hiring going on. Very few are cutting. Only 10% are keeping fixed where you all are. That's consistent with what I'm hearing around most of our region and what I've heard in my meetings, the smaller meetings that I've done so far that I've been here.

Another question. How much do you expect wages in your company to increase over the next 12 months? Everything from cutting wages to 10% or higher wage growth. More than half, slightly more than... well more than half saying 2% or greater, 2% to 5%, 5% to 10%, or more than 10%, the bulk of them at 2% to 5%. We have seen some softening in wage growth nationally, but it's very mixed. It really depends on where you are in the wage spectrum. Over the last couple years, entry-level workers, the lower paid workers had the highest wage growth. There was huge demand for entry-level workers. As you went up the income spectrum, the growth tended to taper off, but it really was depending on the specific category, the specific type of work that people did.

Do we have others? Word cloud, one to three words, what's the biggest challenge facing your company or the larger UP economy? Isolation. One thing that I've been hearing around the region, and especially in the UP, is housing is a barrier to bringing workers in. Even if they're good jobs, even if you can recruit workers from around the country, where are they going to live is a constant problem. That was true

before the pandemic, and I think it continues to be true today. Housing, labor, retention, childcare, another big challenge, childcare availability, and cost. Okay, great.

I think that's it. Is that it? Oh, what impact, if any, have regional banking events had on your company or clients? No impact to significant impact. I'm not surprised by this. As I go around the region, especially in our more rural communities, people really don't feel... They see it on the news, and it scares people when you see in the news that some banks, especially on the West Coast, are coming into trouble and people say, "What does that mean about my bank?"

One of the things we do at the Minneapolis Fed is we are supervisors of banks with state supervisors and other federal agencies to really keep a close watch on banks. By and large, we think that the vast majority of banks in our region don't face the same kind of stresses, we could talk about it, but don't face the same type of risks that banks like Silicon Valley Bank faced. So I'm not surprised that it's not having much of an impact except for the psychological impact of turning on the TV and seeing these headlines, which is unsettling for anybody. Is that it, Ron?

Ron:

[inaudible 00:15:17].

Neel Kashkari:

What's your outlook for the next six months? Very optimistic to very pessimistic. Two-thirds are optimistic, which is again consistent with what I've heard over the last couple days that I've been up here. Thank you. Let's go ahead and take that down. Why don't we hand it to you and we can have a conversation. Then we're going to open it up and hear from all of you. The only other thing I'll say is we are live streaming this, so when we get to Q&A, please introduce yourself so the world knows who you are. Thank you.

Interviewer:

We should have some mics going around as well. I have a few questions to kick us off, and then we'll turn it over to the audience for questions. Why don't we start with a kind of procedural question. You are now listed as a voting member of the Federal Reserve. Can you walk us through what that means, and then what that process looks like? As you're coming across issues, how the nation comes together across all the different districts?

Neel Kashkari:

Every six weeks we have these very formal meetings called Federal Open Market Committee meetings. There are 12 reserve bank presidents, and there are seven governors of the Federal Reserve system. The governors sit in Washington, DC. They're nominated by the president of the United States, confirmed by the US Senate. By law, this is the quirks of law, by law, they vote every meeting, and by law, the Reserve Bank presidents rotate when we vote. So I'm a voter this year, then I won't be voting the next two years, then I'll be voting again.

We all go to every meeting, whether you're a voter or not. We all give our outlook and our read of the economy. We all give our recommendations for policy. But at the end of these two-day meeting, in the last 30 seconds, when they take the vote, certain names are read and then you vote yes or no, and certain names are not read. So the voting actually matters a lot less than you might think because it really is the deliberation that we have at the meeting. That's why I try to come to the UP at least once a

year just because, whether I'm a voter or not, I want to make sure that this region is represented in that deliberative process.

It's a two-day meeting. People are exceptionally well prepared for these meetings. About a week in advance, we get about a hundred pages of analysis from Washington, DC, and all of the latest data nationally on what's happening in the economy. I spend about a week with our team of brilliant economists at the Minneapolis Fed pouring over that data and those analyses to try to come up with our own view of, what do we think this means for monetary policy and for inflation and for the labor market?

Interviewer:

Thank you, Neel. A lot of the questions that were up there, probably the common denominator, of course, is the interest rate. There's been some skepticism, certainly not by anybody in this crowd, about maybe it was a little bit late to arrive on raising the rates and now with a pretty heavy hammer. Can you give us your evaluation analysis on where we were and where we're going?

Neel Kashkari:

I think with the benefit of hindsight, we were late. If I could do it over again, we would've started adjusting policy more quickly. The thing happened is that for the 10 years before the pandemic hit, every time we kept thinking, "Okay, that's it. We're at full employment and inflation's about to come," what ended up happening? Inflation didn't come and more workers took jobs. So it was like a lesson that I learned that, boy, we keep underestimating the America people's desire to actually work and that a lot of people can work and it's not going to cause inflation.

So back after the pandemic was winding down and the economy was reopening, we started to see inflation finally cross 2%. I think this is May, 2021, so two years ago, but there was still 6% unemployment, 5.9%. So by that measure, we've been at 3.5% unemployment before the pandemic with no inflation. When I look at that and I say inflation just crossed 2%, but we've still got 5.9% unemployment, there's still a lot of workers on the sidelines, it seems like we're not there yet. So we ended up waiting about six months until it seemed like the inflation was not transitory, what we thought it was, and then we started adjusting policy.

I would say we were probably six months later than I would like us to have been knowing what I know now. Having said that, if we had adjusted rates six months earlier, I don't think it would've made much of a difference in the inflation that we've experienced. My evidence for that is, if you look around the world, almost all advanced economies are seeing very high inflation, even those economies where the central bank started raising rates sooner. So some of these dynamics are just global in nature, whether it's the war in Ukraine, supply chains that are global that got gummed up, effects of COVID. Some of those were out of our control. The part that we could have controlled is raising rates sooner, I wish we had, but I'm also realistic that we'd still have a high inflation problem today.

Interviewer:

Thanks, Neel. That last slide where we talked about issues, housing blared up there. As we do our business development calls, we know there's a lot of companies looking to hire. They can find people, but they can't find housing for those people. Is that common across other regions that you're working with? What's your general census on the whole housing issue right now?

Neel Kashkari:

It's everywhere I go. Red state, blue state, purple state, it doesn't matter. Housing, affordable housing, lack of affordable housing, lack of workforce housing is the top issue that people talk about. As we've examined it in a lot of detail, I've tried to understand, if there are good jobs available and people who could take those jobs who could afford a reasonable mortgage, who could afford a reasonable payment, why aren't developers coming in to meet those needs? In a sense, that's money being left on the table.

What we've concluded is, this is not the only problem, but it's a big part of it, there are a lot of local barriers that get erected, maybe for good reason, but then make it prohibitively expensive for people to come in and build. It could be land use requirements. It could be minimum lot sizes. It could be minimum number of bedrooms. It could be garage requirements. In California, they have a law that you must put something like \$10,000 of solar panels on a house, every new house. You know what that does? That immediately raises the minimum cost of a house by \$10,000. When you really examine it, there's a lot of local rules, individually good intentioned, that add up at making it very difficult for new supply to come in. So I've concluded overall that the lack of housing for workers is a self-made problem. We've done it to ourselves.

I'll give you an extreme example of this. I go out to Montana, and this is the number one issue I hear. When I look around in Montana, what I see is a ton of available land. I say, "Great, why don't you build over there?" They'll say, "Oh, no, no, no. We can't build over there. That's going to block our mountain views." "Why don't you build over there?" "Oh, that's down by the river. We don't want to get it near the river. We got to protect the river." As I really drill into it, I'm not saying this is true for all Montanans, but there's an undercurrent that I finally figured out where a lot of folks say, "We don't want more people to move here. If we build more homes, more people will move here." For example, they tell me they love the show Yellowstone, I've never seen it, because it shows Montana's beauty, but they hate the show Yellowstone because it's advertising that beauty to the whole country, and it makes people want to move there.

So I ask you in the UP, how much of this is your own doing? I get it, labor's a challenge. I get it. Your building season is really short compared to other parts of the country, so some of this you can't control. But I ask you, the parts of it you can control, are you actually making it easier for developers to come in and build homes and apartment buildings that your workers would appreciate? Now when I say this, I always get this very uncomfortable stare back at me because it makes everybody feel a little bit uncomfortable. By the way, I live in a suburb of Minneapolis where we have very large lot sizes. Guilty right here. If you wanted to build an apartment building on my street, my neighbors would be up in arms. So I'm part of the problem, too. But we need to own up to the fact that this is largely a self-created problem.

Interviewer:

With that challenge, let's open it up to the audience for some Q&A. Who's got the first question?

Doug Brooks:

[inaudible 00:24:08]-

Interviewer:

Hold on for one second.

Neel Kashkari:

A mic is coming to you. A mic is coming to you.

Interviewer:

If we could ask you to say your name and your company, that would be awesome. Thank you.

Doug Brooks:

Doug Brooks, Pine Mountain Resort in Iron Mountain. You talk about housing, you talk about preference to not have people move. What about the issues of land speculators and the price of land just based on what we've seen in the change in the economy and the change of land prices? That prohibits, in a lot of cases, smaller developers or companies from building housing.

Neel Kashkari:

No, it's a fair question. I hear this in the ag sector, too. Farmers will say, "Oh my gosh, land prices are high." I always turn it around and say, "That means your own land prices are high. So tell me that that's a problem." Is the UP really...? Are you really out of places to build because all the good places have been hoovered up by hedge funds on the coasts? I just find that hard to believe. Is it possible that, yes, capital from the coasts is keeping prices somewhat higher than they otherwise would be? Absolutely. Is it possible that homes are being bought by second homeowners who are not living there and that is now taking a space for somebody else? Absolutely.

But the ultimate solution of these problems is more supply. When I meet with... For example, yesterday we did a meeting with people in the mining business, in the forestry business. It's amazing what more supply does to price in any kind of commodity market. So what are the barriers to more supply? So this plot of land got bought up by some hedge fund in New York. What about this plot of land? Why can't people go and develop that?

Doug Brooks:

Thank you.

Neel Kashkari:

Thank you.

Gabriel Kloet:

Gabriel Kloet with U.P. Concrete Pipe.

Neel Kashkari:

Can you stand up so I can see you? Hi.

Interviewer:

There we go.

Neel Kashkari:

Hi.

Gabriel Kloet:

The 2% inflation target, is that permanent?

Neel Kashkari:

Is the 2% inflation target permanent? It's permanent for the near future. Meaning, that is a target that central banks around the world have coalesced around as the appropriate way to balance... Basically, we want an inflation rate that is low enough so nobody has to think about it but above zero, so it gives us a little bit of margin for error, so to speak. It is conceivable that once we get through this inflation period and we get inflation back down to 2%, we could have a deliberation with, for example, elected leaders in Washington and say, "Does 2% still make sense? Should it be 2.5%? Should it be 3%? Should it be 1.5%? But we can't change it while we're missing it.

If we move the goalpost while we're behind, there's no reason any of you should ever believe us in the future that we're actually going to achieve what we said we're going to achieve. So we have to get inflation back down to 2%. The Federal Open Market Committee is united in our commitment to doing that. Once we do that, it'll be an appropriate time to have that conversation. Just because the committee picked 2% a decade ago, that doesn't mean that we need to live with 2% for the next 50 years, but now is not the time to change it.

Jon Mommaerts:

Hi. Jon Mommaerts, Mommaerts Mahaney Financial. We're actually a wealth management firm, so thank you very much for coming to the UP and talking to us at such an important time in the business cycle. My question's a little more specific about wages and the wage component of inflation. Interest rates can only do so much with bringing wage inflation down. I'm a little bit worried about demographics, the aging population, the lack of enough immigration to find workers. Some of my companies are struggling to find workers. It seems like wage inflation is going to go on for a long time because of things outside of your control. How do you guys look at that when you make your decisions on interest rate [inaudible 00:28:09]?

Neel Kashkari:

Thank you. You're right. There's a lot underlying what drives wage growth. Demographics is a big long-term challenge for our country and for most advanced economies around the world. You're also right that immigration has been a key source of labor growth over our nation's history. So ultimately, this is a political challenge that we as a country have to come up with a solution for, in my opinion an immigration system that fits our economy.

If you look before the pandemic hit, we had very low unemployment rate, around 3.5%. We also had an aging society. We also had a haphazard, I would call it, immigration system. And we had modest wage growth. We had wage growth around 3%, which includes 2% for inflation and 1% for productivity growth, and we didn't have high inflation. I don't see any reason why, once we get through this period, that we couldn't at least get back there. Even then, I'm going to want a larger workforce. I'm going to want a highly educated workforce. All of those things will boost our economy's potential and improve our competitiveness. But I don't see why we can't get wage growth back to more normal levels consistent with 2% inflation and decent productivity growth. Now, if there's some big surprise, that productivity growth takes off, then you could imagine having higher wage growth consistent with 2%



inflation, but we haven't seen evidence of that yet, so we will have to see. But long term, the demographic issues that you talked about are absolutely correct.

Korai:

Thank you very much for joining us, again. My name's Korai. I'm a broadband service provider. My question is trying to understand if the Federal Reserve Bank is looking into this concept that I've been thinking about. I think starting with the COVID, the economic indicators had fluctuated in a rapid fashion. We found ourselves in a shutdown of everything, and now we found ourselves in a rapid hiring fashion. Now we're finding ourselves in an inflation.

I think there's a good amount of entities out there as well as individuals who are thinking this is just a temporary issue that we're going through. Part of the reason, I'm going to tie that into, is there are a lot of industries that I'm seeing that the prices are not adjusting along with the inflation. That the prices are still maintaining or the services they charge or the products they sell, those prices haven't adjusted with the inflationary. For instance, the broadband industry is probably one of them. We haven't necessarily adjusted our prices to the customers necessarily, but we are seeing increasing costs from a material point of view, from shortages of the contractors, and the contractor cost point of view.

Does the Federal Reserve Bank measure this by any chance and expect a potential second wave of inflation or any other economic impact when those individuals and entities start realizing maybe this is not a temporary issue, it's more of a permanent inflationary issue or monetary problems that we might be having and start adjusting their rates and their eventual prices to the consumer? Hopefully, I got that question out there right there [inaudible 00:31:34]-

Neel Kashkari:

Yeah, you did. It makes sense.

Korai:

... but unforeseen, sort of a monster under the ground waiting to emerge and come out.

Neel Kashkari:

I'll tell you this, usually what I hear is the opposite of what you're saying, which is usually I hear anecdotes of people saying and businesses saying, "Hey, we raised prices because we could, and we've been surprised at how easily... We didn't think we could raise prices and our customers would revolt. But we've been able to raise prices, so we're raising prices." So usually I hear the opposite, which is businesses and customers are now used to raising prices, so they're just going to keep raising prices because they can. Yours works the other direction, which is they haven't been raising prices, but maybe they will now to catch up over time.

There are government bureaus of economists that are out there in a very orderly manner surveying all of the things that a typical American household buys every month. It's called the basket of goods. It could be food. It's energy. It's automobiles. It's your housing. It's your broadband. It's your clothes. It's everything that a typical family would buy. They're constantly measuring this to see what's actually happening with prices. So I believe you, that there's some dynamic that you're expressing that's happening. I think there's other examples that are the exact opposite where people raised prices because they could, and now maybe they're not going to keep raising prices as things catch up to how high they got.

My guess is it's going to work itself out over time. We do look at the underlying basket. We do look at the individual components to see where price is moving. For example, we know that new rents have come down. They're not growing like they used to grow. It takes a year or two as leases turnover to work their way into the index. We know that goods prices fell a lot after things started to normalize, but they've crept back up again. So we do look at the underlying components. I guess I don't share your concern that that's a big macro trend, but I believe you that that probably is happening on some individual components. Thank you.

Bob Mahaney:

Mr. Kashkari, Bob Mahaney from the Veridea Group. Thank you as well for being here. It's very timely for you to be here given everything that's going on in the economy. For context, I'm in the commercial real estate development business, both commercial, residential, and hotel hospitality. Ironically, our business is focused here in the UP and also Montana, so I can relate to everything you're saying there.

Neel Kashkari:

Did I get right?

Bob Mahaney:

That Yellowstone show has been so good for the hotel business, but I don't like it when those people show up looking to buy the land next to me. You're right. You got it right. You nailed it. If I may, just to follow up on your comment about housing, some context for you to maybe take away and for the room, we're right now trying to do a housing project here in Marquette, a 40-unit, specifically trying to hit the middle market housing segment, that gap, that critical gap. The city's been a great partner with us. I want to point that out. I would also share that the city of Marquette is very reasonable to work with. They're fair. The rules are laid out. They stick to the rules. So it's not their fault. They're a partner.

I just did a little calculation here. The cost of public infrastructure loan for a developer to put in the public infrastructure is easily \$75,000 per housing unit. When you add to that north of \$300 per square foot for the home construction costs, you're already up close to a half a million dollars at least in that house price, which here in the UP, I think our average house price is still below \$300,000. So there's a gap there that we're really struggling to make these numbers work to achieve our objectives, for what that's worth.

I have two questions for you, if I may. I sound like the White House press group, huh? First, what is your confidence level in the calculus that we use to measure unemployment as a nation? Secondly, there's a premise here. The premise is, one of the life bloods for us, we're a capital intensive business, obviously is our community banks and regional banks. So I've been watching closely everything that's going on with SVB and the regional bank crises, deposit crises. What tools are at hand or what strategy is at hand for the Fed to protect our small community banks in the event that there are threats to their deposit base? Thank you.

Neel Kashkari:

On the unemployment rate, we look at a lot of different measures of the labor market and unemployment. One of the quirks about unemployment is you have to declare yourself in the job market to be counted as unemployed. One of the things that we saw before the pandemic hit was, a really funny thing, a lot of people would answer the phone, answer the survey, and say, "No, I'm not employed and I'm not looking," for whatever reason, and the next month they'd take a job. I thought

you were not looking and yet you took a job, so it must have been you were in the job market. So another measure we look at is employment to population. That calculation of what percentage of Americans of adult age are actually gainfully employed takes away the assessment of, "Am I looking or not? Do I consider myself in the job market or not?" because that's a fuzzy concept for a lot of folks. So we slice it a lot of different ways.

I would tell you, if you look at what's considered the prime age workforce, which is 25 to 55 roughly, by most measures, the labor market looks like it's roughly back to where it was prior to the pandemic. Most of the missing workers are Americans who retired early. The pandemic hit, they were in a position they could retire, they chose to retire. So that share of the population is not fully recovered in terms of workers.

The other thing I'll say is, I said this earlier, before the pandemic hit, every time we thought, "That's it, we're out of workers," we were wrong. More workers came off the sidelines and took jobs or people that we thought were retired didn't retire and they kept working. So I'm not convinced we're really at maximum employment yet, but I do know we have an inflation problem, and that wage growth is growing higher than is consistent with 2% inflation. So long answer. We look at it a lot of different ways to try to get a sense of what is the true unemployment population in America.

Second, you asked about small banks and regional banks and losing their deposit base. The challenge for banks and their deposit base is that we've raised rates aggressively. Understandably, banks don't want to raise their deposit rates because the bank's margin is that they can pay very low for deposits, your deposits, my deposits, and they can make higher money on the loans that they turn around and make. That's called their net interest margin. As we raise interest rates, they then have to pay more for deposits to keep those deposits. If their loan portfolio doesn't move up at the same time, then their margins compress. Right now, we have something called an inverted yield curve where the front end, the short interest rates are very high, much higher than long-term interest rates.

The real question is, when is inflation going to come down? If inflation is going to stay high and it's embedded in our economy and we have to run tight monetary policy and an inverted yield curve for an extended period of time, that creates real problems for banks of all sizes. We're very aware of that. If the markets are right, that inflation is going to fall pretty quickly, then one might imagine interest rates normalizing, the yield curve un-inverting, and then the pressure on banks and their deposit bases becomes much, much smaller. So it really depends on how embedded is the high inflation that we're seeing and how quickly is that inflation going to come back down to our 2% target. We're watching it very carefully. Sorry, long answers, but there was a lot under your questions.

Bob Mahaney:

I hadn't thought about the whole [inaudible 00:40:07].

Steve Bobowski:

My name's Steve Bobowski. I'm with Dale Carnegie Training. My question to you is, how much does the person in the Oval Office affect you guys and the policies that you decide to pursue?

Neel Kashkari:

Well, both parties have done a really good job over the last 30 or 40 years of saying, "Let's keep the nation's monetary policy independent from the day-to-day winds-blowing of politics in Washington." When we deliberate over interest rate decisions, those meetings are confidential, but five years later, a transcript comes out. So when people study the transcripts, it's never about politics. It's always about

debating the economic signals that we are seeing. Now, I don't want to say it has no effect because, when there's an opening on the Board of Governors, the president of the United States gets to appoint people that he or someday she have confidence in, subject to Senate confirmation. So that's the channel by which the White House gets to influence monetary policy by their appointments.

But if you look at our deliberations, you can't actually point to, "Well, this person who's voting this way must be a Republican and that person must be a Democrat." I ran for governor of California as a Republican. I joined the Fed. I was the most dovish member of the Federal Open Market Committee, both when President Obama was president and President Trump was president. I'm now on the more hawkish end just based on my reading of what's happening in the economic signal. So people wanted to paint me as a dove, and now they're confused by saying, "Well, wait. He appeared to be a hawk." My answer is, "I'm just looking at the data and adjusting my policy recommendations." So I actually think people would be very proud if they could understand the analysis that goes into these deliberations, how serious the deliberations are, and how removed they are from these type of short-term political considerations. Anyway, I hope that helps.

Gina Thorsen:

Hi. Gina Thorsen, Jacquart Fabric Products and Stormy Kromer over in Ironwood. I'd love to hear some of your thoughts on the consumers today. In our small part of the world, going out to eat costs twice as much as it did even six months ago, and yet restaurants are still full. Partially that's because maybe hours have shrunk because of labor issues. But I am sort of anecdotally worried about credit card debt for our lower-end consumers, higher interest rates on that, and wondering your thoughts about any sort of crash happening on the consumer side. Are we going to see consumers start to not go out and shop and eat and pulling out their credit cards to do those things?

Neel Kashkari:

It's something we're paying close attention to. When the pandemic hit, obviously the services economy shut down, so people stayed at home and bought a lot of goods, so good spending. There's a mix of how much the typical family will buy, services, whether it's going out to eat, or goods, buying cars and buying clothes. That mix shifted dramatically towards goods. Services has come back, not all the way, but goods is still elevated. It's just a curiosity of, what are people buying? What are all these goods? Don't you have enough jeans? How many jeans can you buy? When is that going to fully rebalance?

On average, American households are still doing very well in terms of their own personal balance sheets. On average, most homeowners still have a lot of equity in their homes. On average, people's checking account balances are still significantly higher than they were before the pandemic, in part because there was a lot of fiscal stimulus given to families and small businesses across the country. But we also know on the lower income spectrum, those extra balances have been paying down, and you are seeing evidence that credit card balances are increasing, and especially lower income consumers are more stretched. So it's something we're monitoring carefully. I'm not seeing evidence of an immediate crash in consumption. We're seeing, if anything, consumers are holding out better than we would've expected. You try to book a flight. Flights are extremely expensive. The flights are almost all full. We're not seeing a lot of evidence yet of slowing down of the services side of our economy. So something to watch. Other questions.

Gradon Haehnel:

Hi. Gradon Haehnel with UPPCO. We're a [inaudible 00:44:50] power company here. So quantitative easing over the last 12 years has really been remarkable for private equity investment. Using round numbers, \$800 million at 5%, which might have been a loan term in the prior 12 years, in this new environment might be \$500 million at 8%. So, I guess, how does the Fed contemplate this scenario where we really have almost now two generations of investor and investor community knowing real interest rates declining? This is a new environment. It's a new environment for many in terms of they're saying, "Look, that delta, how am I solving that next \$300 million? How is private equity going to react to this in a new way? How are the banks going to react as they're trying to compete for the business? That's my question. I don't know if there's a question in there.

Neel Kashkari:

Well, I'll do my best. If you look over the last 30 or 40 years, there's been a trend in advanced economies around the world that interest rates have gradually declined. Now, why is that? They have declined, in our view, because the neutral interest rate in the economy has declined. What is the neutral interest rate? It's the interest rate that balances savings and investment. If there's more demand for investment capital and there's fixed supply in investment capital, interest rates are going to go up. If there's less demand, interest rates will drop. We think that neutral interest rates have been dropping all around the world because societies have been aging all around the world, and it's a complex... It's between trade, technology development, and the aging of society has caused this gradual decline of interest rates around the world.

So what's going to happen when we get through this high inflation period and we get back to whatever normal is? If I had to guess today, I would tell you my guess is that normal looks like normal looked like in 2018 and 2019, that we'd be back in the same type of economic environment: low inflation, low interest rates, modest wage growth, decent economic growth. It's possible that neutral interest rates will be much higher going forward, and we're all going to have to learn how to operate in that environment. I haven't seen any evidence of that yet, so we will see.

If neutral interest rates go up for good reason, if neutral interest rates go up because there's massive investment demanded on really high productivity projects, that would be great. That would mean our economy is growing, that means we're producing more. That means we're more efficient. There's all this upside, new innovation taking place. We'll have to see. It's too soon for me to believe all the hype around AI, that the future's... all of a sudden nobody's going to have to work anymore because computers are going to do everything. So we'll have to see. Anyway, I hope that helped.

Jeff Littmann:

Hi. I'm Jeff Littmann with the Michigan Tech Board.

Neel Kashkari:

Hi.

Jeff Littmann:

When interest rates were net negative, very low, corporations got very aggressive and went out and extended duration and got ahead of it. Households did the same thing by refinancing their mortgages and locking in low rates. By and large, the federal government did not do that. They took advantage of the short-term rates and stayed relatively short term on duration. How much do you worry about...?

How much do you track the rollover in duration of the federal debt, the impact that has on the interest rates on the federal budget, and what that's going to do to discretionary spending as we go forward?

Neel Kashkari:

The answer is... I don't mean to be flip, not at all. The reason is it's not our job. This is the segmentation between fiscal and monetary policy where our jobs are to manage interest rates to try to achieve our dual mandate goals that Congress has given us, and it's Congress's job and the executive branch's job to think about, how much do they want to spend? How do they collect taxes to finance that? How much debt do they choose to issue? What do they want to spend that on? What's the structure of that debt? That is entirely up to the Treasury's job. It's literally not appropriate for us to factor that in to our monetary policy deliberations. I gave you kind of a flipping answer, but it's actually true that that's where the segmentation is. People ask about the debt ceiling. We're paying close attention because if the US government defaults on its debt, that could have profoundly negative implications on the US economy, so we need to be aware of that. But that's up to the executive branch and Congress to sort out. We don't have a role in it.

Brock Tesmman:

Mr. Kashkari, my name's Brock Tesmman. I'm the president of Northern Michigan University, so I want to thank you and all the CEOs here for having this event on our beautiful campus.

Neel Kashkari:

Thank you.

Brock Tesmman:

I'll also note, like Bob, I have Montana connections. My family and I moved here just in February from Montana. I noticed a lot of overlap in terms of the challenges that this region faces and the challenges Montana faces. One of the things that's been striking to me throughout my life in looking at the Fed is the aggregate approach that you take, and that's your charge, to think nationally about inflation and employment and use interest rates as a tool. But my question is about a disaggregated approach. I know you may not vote that way ultimately, but in your deliberations, do you think about the disaggregated impacts? For example, in your district, you have a large number of tribal communities, tribal reservations. To what extent do you think about how inflation or unemployment affects different populations differently?

Neel Kashkari:

Thank you for asking that. In fact, we have a research center called the Center for Indian Country Development that is specifically focused on understanding tribal economies and what are the unique challenges that they're facing. So it doesn't come into, "Well, this means we should have a different interest rate for the nation based on our research on tribal communities," but I'll give you an example where it does.

In the pandemic, there are a number of programs that were set up to provide aid to, for example, businesses, small businesses, larger businesses, to get them through the pandemic. Well, the structure of tribal enterprises is completely different than the structure of a C-corp or an LLC or LLP that you might have in a private business. Well, all of a sudden it dawned on our experts in our Indian Country Center that these programs that were being set up just were not going to work for tribal enterprises. So we had

to then go and reach out to tribal enterprises, understand how they're structured, and how could you design these programs so that they could actually include the tribal enterprises, and it's intended to include them, too.

So that's a way that we were able to make sure that those specific considerations were factored into the design of those programs. We even dispatch people on a temporary detailed basis to the US Treasury Department who had money allocated by Congress for tribal governments to give them the technical expertise they needed to be able to design those programs so the tribes could actually access it. So it's something we do think a lot about, but it's much more granular at the research level and the technical level rather than saying, "Therefore, interest rates should be different."

Interviewer:

We probably have time for one more.

Neel Kashkari:

Here in the center of the room.

Ingrid Tighe:

Good morning. My name is Ingrid Tighe, the president of the Michigan Manufacturing Technology Center.

Neel Kashkari:

Morning.

Ingrid Tighe:

I'm curious what your thoughts are. Right now, our state level, federal level, we're flushed with cash now in terms of the American Rescue Plan, CHIPS, Inflation Reduction Act. I'm curious what your thoughts are on the short-term and the long-term impacts of these kinds of programs? I think there's obviously some things that are going to be very helpful, but I also worry about what that's doing for topics such as our national debt and other things long term.

Neel Kashkari:

It's a good question. In the near term, some of those sectors are probably going to see higher inflation because there's huge demand now for more investment. If everybody's making the same kind of investments, whether it's solar or wind energy or transmission or batteries, on average you'd expect to see the prices of those things go up. So I would expect to see high prices in a lot of the sectors at the front end of the spear of this green energy transition that we are trying to undertake.

What does it mean long term? Really unclear to me. As I mentioned a few minutes ago, we had very low interest rates before the pandemic, and it seemed like we had more savings in the economy than there was demand for investment. Maybe if this demand for investment is sustained over a long period of time, that means the interest rate environment on the margin is going to be higher than it used to be before. On the long term, is it net inflationary? Is it net deflationary? I don't know. I've seen some estimates that say there could be so much wind and solar coming online that, during the day, some parts of the country are going to see negative prices for power. Now, maybe that means everybody's

going to charge their car during those times, and it's going to be free to charge their car. That would be great if it's free to power your car.

I just don't know how this is all really going to shake out once it gets enacted or put to use at scale. What I do know is it seems to be big. It seems to be really moving the needle on a number of related industries. My sense is it's still quite uncertain to what it's going to mean long term. Sorry, I don't have a better answer for you, but it's a good question.

Ingrid Tighe:

Thanks.

Interviewer:

Well, Neel, let me take you out on this last question. We asked this question to our CEO panel last night. You are tracking so many different variables, so many different things going on in the world. Is there one thing or two things that are keeping you up at night that really make you stare at the ceiling at 3:00 a.m.?

Neel Kashkari:

I hate to say this. It really is the outlook for inflation. If inflation is going to stay high... We've been surprised how high it got. We've been surprised how persistent it has been. It's coming down. There's some evidence it's coming down. But so far, it's been pretty darn persistent. That means we're going to have to keep at it for an extended period of time.

As I said earlier, if the yield curve is going to be inverted for an extended period of time, that does create real stresses in the banking system because appropriately customers are going to say, "Well, why don't I go to a money market fund? I'm going to get 5% on the money market fund. Why would I leave it at a bank where I'm getting 1%?" So that puts real pressure on banks. The '08 experience is burned into me where every time we thought we were through it, it still was burning and there was still longer to go. So it's that intersection between how embedded is inflation, therefore, what does monetary policy need to do? Therefore, what strains does that put on the banking sector? That's the thing that I'm trying to pay a lot of attention to.

Interviewer:

Thank you. On behalf of the InvestUP board and everybody in the room, we really appreciate you making the time to come here. Thanks to Ron in the back. Really great working with you. You did an awesome job helping us this organized.

Neel Kashkari:

Really appreciate [inaudible 00:56:21]-

Interviewer:

So thank you.

Neel Kashkari:

... conversation. Thank you.



Interviewer:

Appreciate it. Thank you.