John:

Well, I want to jump in really with the outlook for the economy, the outlook for growth. If you look at the March FOMC meeting, wasn't that long ago, there was a downward revision for many participants in terms of their growth outlook for this year. 2022 came down on a fourth quarter to fourth quarter basis from 4% in December to 2.8% as of March. And 2.8% though is still a percentage point above the economy's potential, so it's still a pretty strong growth outlook. Now we've had quite a lot of information since then. And I'm curious, where do you stand relative to that kind of median view of the committee?

Charles Evans:

Well, thanks, John. And it's great to be here in New York before this very important MNA club. And in terms of the US economy, I think the fundamentals for the economy continue to be relatively strong. I'm pretty comfortable with the median forecast that you just laid out there. In fact, when the summary of economic projections were put out there, most of my own projections were pretty close to the median, if not the median. I think for the US economy, many of us thought that this year would be a stronger growth year, but we've seen some unevenness over time. I think the uneven effects of the Omicron virus transitory, relatively minor Delta. In terms of the employment reports that we saw last year, they were initially released as pretty uneven. Some of them very strong, then a few weaker. And then when the data revisions came out, it was kind of pretty smooth, strong throughout.

Charles Evans:

And so I think that the current forecast of 2.8%, it's above potential, but we're still sort of recovering and doing quite well, labor markets are doing well. The unemployment rate is close to three and a half percent and consumers are probably in about as good a financial condition as they've ever been partly through fiscal support for the low moderate income households. And just also age income has been good, too. So there's good reason to expect this will continue through this year into the next. And even in a rising rate environment, I think that the US economy should do very well. Now inflation is high, and that's really the challenge that we have before us, but I know we're going to talk about that just in a few minutes.

John:

We're going to talk about that and that obviously is important, very important in its own right. But it's also important for the growth outlook because it does have some implications for one of the aspects that you just mentioned namely, strong willing. And I think that's certainly very visible in terms of levels. And certainly if you take a cumulative approach to this, but in terms of the growth rate of reeling in 2022, that does look somewhat weaker with the high inflation eating into which gains, and also of course the fiscal step back. And I guess I'm curious how you're thinking about that in the context of an above potential growth outlook.

Charles Evans:

In the middle of a highly interesting, pretty vibrant labor market setting, where workers being called to come back to the office if they had been working remotely. Many essential workers, manufacturers, employees have been working on site for a long time, but they've been working very hard. One reason why businesses might have trouble finding workers is because they're opening third shifts that aren't normally open in order to meet goods demand and there's a cyclicality to that. And workers are probably wondering, "Well, if I take that job, how long is it going to be around?" And things like that. So

there are many opportunities which are leading to strong employment opportunities for anybody who's willing to look for those jobs. Wage increases for many of them, especially at the lower end of the income spectrum. If you were under \$15 an hour, where an increase in the minimum wage to \$15 might have been meaningful. Many jobs have just blown right through that and they have higher wages.

Charles Evans:

So now you get to the harder part of real income and how it's growing and the inflation price increases that we've seen certainly erode those gains. Some of that is high gas prices, all kinds of things which might work themselves out over time, but there could be continued wage pressures for many people. This is a period where I think there's going to be a lot of still searching around for what the right wage levels are and whether or not workers are willing to move around in order to take advantage of that.

Charles Evans:

One thing that I struggle with so much as economists and at the more elementary courses that get taught, the thing that equilibrates labor demand and labor supply is the wage. And for workers who are really in a spot labor environment where they're willing to move around, you would expect even with these price increases that the spot wage ought to increase in order to clear the market, especially in an environment where demand for labor is so high. So I think it's still to be seen how it works out the real income gains and how that really is affected by the price increases that we've seen so much, but we need to be mindful of a wage price viral that takes hold. And that would be one of the things to monitor.

John:

That's a great segue to the next question I was going to ask namely, really the supply demand imbalance in the labor market. If you just focus on the number of open positions versus the number of unemployed workers, 11 million open positions, six million, just under six million unemployed workers, that five million gap is the biggest that we've had going back to the 1950s, if you are willing to extend some of these series back.

Charles Evans:

I wanted.

John:

Whether in absolute terms or relative to the size of the population or the size of the labor force. So I guess my question is, how concerned are you about that imbalance? Obviously we want a strong labor market, but is this too much of a good thing? Is the labor market very overheated in your view? Would that be an accurate description? And do you think that gap needs to close? And if so, how is it going close? A lot of questions there.

Charles Evans:

There are. As I mentioned earlier, it's a vibrant market. So workers looking for gainful employment often have many opportunities. Professionals working in office settings, they have even more opportunities. Where am I going to work? I might even be able to work for the same employer, but I might not be working in Chicago or New York. I could be working in Florida or someplace like that. So there are a lot of challenges there. Now, if you're talking about job openings, there's sort of this long, it's almost cyclical that in environments like this, you have lots of job openings. Sometimes you have duplicate

openings that are posted because they're really looking for workers. So they advertise in multiple places and that can get counted in that regard.

Charles Evans:

I think as I get this question more, I should be utilizing my staff on this. It's kind of like these openings are at what wage setting? Is it one that the firm wants to offer? Is it one that the workers are going to take them up on? And so you have lots of openings at very low wages, relatively speaking, and not so many when wages go up. Or remote work is part of it. How many people have heard from their recruiters? And it's kind of like, "I've been looking for IT professionals," and such and somewhere along the line, very quickly they ask, "Can this be a remote only job?" And if the answer is no, usually ends the interview pretty quickly, that type of thing.

Charles Evans:

So there are many things going on. I won't be surprised if part of the gap is closed by openings just being withdrawn, so to speak and not felt. I do expect people to come into the labor force and take those jobs up. And I think it'll be a lot of rematching, too. And that's not exactly embodied in these numbers. It's just people with existing firms who are looking for different opportunities and maybe they'll find them with a similar firm, but is more open to that kind of remote work.

Charles Evans:

One thing that I think is really challenging in this, you can almost convince yourself if you're a manager and you've always liked to have your employees in front of you because that's how you manage, but workers, we've learned that we can meet our business objectives from home, at least at the Federal Reserve Bank of Chicago. I think we've been pretty successful in that regard. You could kind of convince yourself that people just wake up and decided they wanted to work remotely. Or the case that there's been a large percentage of people who always asked if they could work remotely, but they always got the answer back, "No, it can't be done. Just don't know how to do it." Just would love to and they heard that from other employers.

Charles Evans:

The one thing about the last two years is we demonstrated that technology exists. We've been able to make that work. So you can't just say, "That can't be done." You have to get other answers. And then other firms are finding different ways to do it. I think the labor market is going to really evolve a lot over the next many years, and it's going to be a challenge for a lot of business models.

John:

Thank you. Moving on to more squarely on the inflation outlook and the recent information, we've gotten some, I would say mixed information on the inflation numbers. If you look at last week's data, the core CPI came in the low expectations for the first time since August with more weakness in the goods categories that have driven a lot of the increase, also somewhat encouraging rent numbers, rent and owners equivalent rent incomes.

John:

But at the same time, we're seeing more concern probably about supply chain disruptions picking up again in the wake of what's going on in China, in the wake of what's going on in Russia and Ukraine and the labor market data continue to be very firm. So to the extent that you think the inflation process is

really by what happens in the labor market, to a large extent, you'd probably be more concerned than you were. Where do you fall out? Where do you see the incremental information on the inflation outlook? Are you still revising up your inflation numbers, or do you think that process has now come to an end?

Charles Evans:

Oh, that's a good question. First off, I think the issue that you're alluding to is a very important one. I think it's a little bit further down in the pecking order of concerns. First concern is just, inflation's very high. Last month it was 7.9% on the CPI. Now it's eight and a half percent, but of course, looking at the composition, you can't take note of some positive developments if they persist in that regard. Monetary policy, I know we'll talk more explicitly about that, but we're still at the very low what some of my colleagues have referred to as an emergency setting for the funds rate. And so we're moving to adjust that at least toward neutral and then we'll see. And so we need to respond there.

Charles Evans:

It's still too early to be thinking that the inflation challenges that we're facing now are changing importantly, but we need to take note of that, and they could be. I think the most recent, inflation just leaped up very quickly. The February, that's the report that I paid most attention to, even though we got new data just the other day. For the CPI came in at 7.9%, February 2020. What's striking about that report is the column right next to it, February 2021, previous 12 months were 1.7% for CPI. And 1.3% for core CPI, we'd gone through this long period of below 2% inflation after the great financial crisis, we kind of got up to 2% and then it kind of eased off a little bit. Then COVID hit, and most recently it had been low and then all of a sudden it leaped up. And there were some important microeconomic reasons, industry reasons why that happened.

Charles Evans:

Used car prices went up 10% more, 7% the next month and 10% the month after that. They've gone up 40% and their whole industry reasons in terms of supply chains, semiconductor chip shortages. They're not enough new cars on the lots. And so people might even make an offer on my daughter's 2007 Toyota Corolla that she handed back to me some years ago, it might have some value. And so I think that's going to come down and that's a little part of what is in that positive, good news. It's also the case though that home furnishings have increased quite a lot, and the hotel/motel.

Charles Evans:

I asked my colleagues, my staff, when people say the Fed let inflation get away from them. And I see all of these microeconomic reasons why it went up. And it's like, can we cut the data in a way that might sort of separate these? And you can cut the ones that I just mentioned, vehicle prices, home furnishings, and motel/hotel. And that bucket is about 15% of the core CPI bucket, that went up 20% as of the February CPI, 20%, and a lot of it was vehicles. The remaining 85% was up 4.1%. Now 4.1% is a big number, so that's something that we need to be paying attention to, but that component that leaped up, if it does a turnaround... First off, if it stops going up, that's a zero contribution. And if it doesn't turn around, then it's going to be adding nicely to reductions in CPI.

Charles Evans:

So I think there's this sort of two part aspect where you've got the goods part, which could do a little round tripping and that would reduce inflation some, and then we got to get our arms around how

much this is broadened out to the rest of the basket. And that's true monetary policy looking at that. And we're just going to have to be looking at that very carefully for quite some time. And the story I just told could change pretty quickly.

John:

That's another great segue to what are you going to do about it? About the 80% of the basket? I mean, growing 4%, the unemployment rates at 3.6, the estimate, at least in the SEP for the longer term unemployment rate is a little above that. So you are beyond the goal or long term natural rate estimates that you've laid out. But you talked about policy moving back to neutral, wouldn't this be an environment in which you should be clearly above neutral or at least intend to get there pretty quickly? Why are you saying neutral? Why are you not saying well above neutral?

Charles Evans:

Well, because this is going to be a journey. Wait, we're in zero or we're 25 basis points off. And let me just say, you don't want to estimate the SEP for neutral nominal federal funds rate is two and a quarter to two and a half. We got 200 basis points just to get neutral. And the median number of 25 basis points increases in the March SEP was seven. If we were to do a couple of 50 basis point increases as well as those 25s, if you had nine of those, that would get us after the December meeting to this two and a quarter to two and a half neutral ring. So, neutral is ahead of us.

Charles Evans:

If you're driving from New York to San Francisco, it wouldn't be crazy to talk about, well, I'm headed towards Chicago and I'll see how far I go after that. So by December, we are going to get more data on the micro aspects of the high inflation price increases. How much is broadening out to that 85% that I talked about? If that 4% rate was contained in sort of a first stage to three, to three and a half. And then if the other 15%, which went up by 20%, if 5% it came down, that can get you to a quarter core CPI. Now, that would be a very artificial two and a quarter because you've still got that three to three and a half percent for the largest part.

John:

So taking credit in some ways for the temporary correction there?

Charles Evans:

I object to that term, "taking credit." I don't know if I have to take blame for everything that's gone wrong with semiconductor chips, but if I have to take the blame, I should get the credit. No, this is just laying out of the scenario. The first step would be some turnaround, further evidence of improvement along the lines of what you suggested hinted at in the most recent inflation report way too early. But if it did, then the second stage would be dealing with that three to three and a half percent. By that time we're at neutral. And to the extent we don't see it coming down, we're going beyond neutral, absolutely.

Charles Evans:

But if it looks like it's sort of also coming down, that the first round wage effects aren't being passed along or they're being passed along and then they're settling in, then it could be that neutral would be about right. Last thing on neutral is there's this, it just gets complicated. I apologize, but there's this unconditional neutral, which I call two and a quarter to two and a half. And then there's special factors

that take place. And it could be that short term neutrals actually lower and by the time we get to two and a half, it's actually more contractionary for a variety of reasons, can go the other way, too.

John:

In terms of the path you laid out a potential scenario, do a couple 50s first, and then you keep doing 25s. And I imagine that obviously is going to depend on how things develop, what you see in the data and what sort of things. If we assume that you start off or you get to 50 basis points, and then at some point you slow that pace down, what would you be looking for most importantly, to tell you at what point you should slow down? Just being higher, being closer to your neutral estimate, what the sequential growth numbers are saying, what the inflation numbers are saying, what would you put most weight on in making that decision?

Charles Evans:

Obviously, if inflation for some reason began to re-accelerate, I think that would be a cause of great concern. I think that on a path that included these nine increases for this year by December, on the way to December, you'd be looking for any confirmation of the storyline like I mentioned, our goods prices improving is the shift in consumer and business preferences for goods over services, which took place during COVID. Is that reverting back? And is that easing the pricing pressures? It's a little counterintuitive for those of us who remember that service price inflation is usually higher than goods inflation, but this would be an attribute. Well, we'd have to see how that plays out.

Charles Evans:

If the labor force return is going well, and people are settling in and business reports are that things are still... able to find workers. That would be a good sign. Then in December, it could be, I have a better sense that... And probably we are going beyond neutral. I mean, that's my expectation when I see that taking out special factors, I'm still left with three to three and a half percent inflation, that's not what we want. If the two and a half percent inflation rate, I think we have more things to ponder there. Or if you see signs of slowing economy beyond what we would expect, mortgage rates are high. So I would expect that home purchases might sort of cool down. They're still very hot, though.

Charles Evans:

Auto purchases, so there aren't enough autos vehicles being produced to satisfy all of the demand. People are still paying way above sticker price, and it's hard to take possession of a vehicle. You don't even hear things like financing costs or whatever. For the longest time, I learned that from the auto folks, buyers always, they like a \$500 monthly payment, a large part of the population. If you're going to finance it, \$500 is your payment. Mortgage rates go down, auto rates go down, you can buy more cars. Auto rates go up, you extend the payment period or you buy less or you stop buying. If we start hearing more about financing, that's probably a sign that the policy is having an intended effect and whatnot, but it's going to be monitoring the trajectory of the economy. And then wildcards of course, are geopolitical issues.

John:

We've spent a little bit of time talking about the path for the funds rate. We haven't spoken at all about the balance sheet and what the committee has said, of course, is that balance sheet normalization is going to be running more in the background. However, there's been kind of return chatter in the market about potential for using the balance sheet more actively, potentially selling mortgage backed securities.

And do you think that something like that could make sense? What do you think the hurdle is for it, or are you very much in the camp that this is going to be running in the background, and it's really the funds rate that we ought to be relying on?

Charles Evans:

So these are important issues. Our monetary policy tools have definitely expanded from the '60s and '70s, for sure. We're using quantitative easing. When we get the funds rate to zero, we hit the effective lower bound. And we've learned from our previous experience, QE in 2008 until 2015 and all of that. So we've learned useful lessons, communicating is very important. And there's wide agreement, we just published principles for how we were going to adjust our balance sheet. And the federal funds rate is the primary instrument of monetary policy. It's probably a bit too lib to just sort of say, you'd like to get the runoff in the balance sheet on autopilot sometimes with somebody. One of my colleagues said, "We want it to be watching paint dry, you're just watching it happen." That ran into issues in December 2018 and things like that.

Charles Evans:

So we know that we want to adjust the balance sheet very carefully. So the most recent minutes indicated that the committee had talked at some length about letting the balance sheet run off at \$95 million a month, those being the caps. My expectation would be that once we set that and we get up to the pace of \$95 billion, we would do that. And it wouldn't be on autopilot because we'd always be looking at conditions that would make us want to do more, but that would not be an active tool. If the economy needed more restrictiveness or more accommodation, it would be adjustments in the funds path that we should be doing that. So that's how I see that.

John:

Do you have an estimate of what the balance sheet adjustment equates to in terms of funds rate heights? If you say you're getting up to \$95 billion per month caps and you let that run for the three years. So there's going to be accumulative [inaudible 00:26:11], \$2.5 trillion, or whatever the number is, somewhere thereabouts. Should we think of this as one hike in the funds rate, three hikes in the funds rate, any order of magnitude that you can give us on that?

Charles Evans:

Well, I think that's the range estimate as I've heard people talk about this. So I think there's a lot of uncertainty about this. Then events intervene to make it very difficult to identify how much actually happened. But 50 basis points is one number that has been mentioned by many and I don't have serious concerns about that. I think the act of letting our maturing assets roll off by itself communicates that we are embarking on getting back to more normal situation and we're letting the funds rate find it's appropriate level in order to help facilitate the achievement of our dual mandate objectives.

John:

Wanted to turn to one longer term issue, namely the monetary policy framework, the 2020 framework review, which has come in for some criticism recently on the wake of this inflation overshoot.

Charles Evans:

Why? I don't understand that.

John:

I mean, one important change was that it was a shift somewhat away from preemptive tightening towards more of a whites of the eyes approach in inflation. I don't know if you think that's fair characterization, but I think that's the way it looks to many. And do you think that given the extent of the current inflation overshoot and the broadening of some of the inflation, do you think that shift have gone too far?

Charles Evans:

I think that the framework that we put together recently was a substantial improvement in otherwise very good framework that was adopted under chairman Bernanke back in January of 2012. I think that we've benefited from being more explicit about what our inflation objective was. There was a time where we didn't say explicitly what the objective was. I've been with the reserve since '91 and it wasn't until '94 that they even made an announcement that the meeting had ended and they took an action. People had to guess what the action was. So I think we made broad strides and quite a lot of progress.

Charles Evans:

Most recently, we've struggled. In my opinion, I've spoken about this quite a lot. I think the committee struggled mightily to describe and act upon a symmetric inflation effective. I think that when we said 2% and I think among mainstream central bankers tend to be a conservative law. If you say 2%, under 2% is just perfectly fine. You want to be close to 2%, but under isn't... over 2%. Well, I don't know, that makes me nervous. How much? 2.1. Oh, I don't even like that, 2.2 goodness. So I think I did not look at our experience before this and say yeah, that was symmetric inflation. Oh, sure. I had many colleagues who would be forecasting that inflation is below 2% now, but within two years we'd be at 2% and then events intervened and we didn't do that.

Charles Evans:

So because of that, you could argue that we've moved the ceiling higher. If the ceiling was 2% now, when we kind of say, well, we want to average 2% over time. But I think in a low interest rate, lower as to our environment, this is really challenging. And so we did try to back off of the... We'll be preemptive. And when we're preemptive, sometimes we see inflation coming and we act, sometimes we see nothing. We think we see it and it's not coming. And we act then the economy suffers from that because of the restrictiveness. And so we tried to move that so that we should average 2% inflation over time.

Charles Evans:

Of course, what nobody anticipated was that we were going to see this massive COVID shock, which was going to shut down the global economy. And then starting it again has been very, very hard and the virus is still around and being dealt with around the globe. And so, as I say, we just saw inflation leap up. And if there's anybody who... In February 2021, when the CPI was 1.7% and you could see the fiscal support coming and you talked about overheating, it seems to me, all of those arguments were about a slow progression of inflation, which then monitoring it and waiting for it to come made sense. If the same arguments had been, "There's going to be a supply shock. That's going to be dastardly devious." I'd want to see some evidence and it would've taken a while, I think. So I think the framework, it's just one of those things where we were extremely unlucky, the economy and all of that. And I think the framework is still quite sturdy.

John:

And one aspect of the framework and you touched on it is, averaging over cycle and there was a problem with the previous framework as you said in practice, it ended up being more asymmetric. But at least in principle, there was always an answer to the question, what would be the ideal inflation rate to be at two or three years down the road? In theory, it was always, you want to get to 2%.

Charles Evans:

Right.

John:

In the previous framework. Now, it's not so clear. Now, if you look at 2024, I mean, what would be, if you could just pick a number, we know what's happening in the short term, we know this year is going be well above 2%, next year, probably still above 2%. Let's say 2024, if you could just pick a number, what would that number be? Pre-2020, I think the committee answer would've been 2%, but I think many of us don't know. Do you want to be below 2% because you have to make up for the overshoots or are you actually happier being a little bit above 2%? Because after all, at some point down the road, probably something's going to happen. There's probably going to be a recession eventually, if we haven't had one until then. That's going to get us to lower numbers. So if you can just help me with that, that would be-

Charles Evans:

Well, those are good observations. And those are scenarios which could definitely come to pass. And so the question becomes, what's your intention? I remember chairman Bernanke, back when I thought that inflation was about 2% and we would just work to get it up. And I always thought if all you're doing is to work to glide in 2%, there are too many things that keep you from getting to 2%. Whereas if you're willing to overshoot, then something happens, at least you get to 2%. So that's why I thought overshooting was always part of what symmetric inflation should be. Now under the new framework, we've said that we should average 2% over time on average. We said that after a period where we had underrun for some time, we should overrun for some time. We did not similarly say that about if we were above two.

Charles Evans:

So we're not doing price level targeting where we absolutely need below 2%. If for the sake of averaging 2% and getting inflation expectations where they are, should be consistent with 2%, it could be the case that we need to lean harder into restrictive policies. I certainly get that. I think the issues are, we want inflation expectations to be consistent with the 2% on average, over time objective. And coming down from above would be quite acceptable, but with a vibrant labor market, with an economy that's doing really well. Again, Bernanke used to be of the, when things were really well, you could come down more quickly if things were not, you'd glide down gently. So I think all of those operational aspects can still be in place. There's also the unknown, but you can have an idea of this.

Charles Evans:

Just think about fiscal policy. Fiscal policy was a big impetus for the strong economy and the inflationary pressures. The fact that the supply chain was struggling under so much goods demand. It can also turn around depending on what the composition of Congress looks like next year, we've had periods where we've had gridlock and gridlock has sometimes been mentioned in a very positive sense in that regard. But one would guess that would not be the same kind of outsized fiscal stimulus that we have seen

more recently. And then there are different gradations of that. I think that in 2011, the emphasis on fiscal austerity held back the economy and we had a very slow rate because of that, all of those things would be doing part of what you would be expecting, policy, monetary policy restrictiveness. And so a crystal ball could help there.

John:

I'm going to ask you one last question and then maybe we can take a couple questions from the audience if that-

Charles Evans:

Absolutely.

John:

... makes sense. So your former colleague, my former, Will Dudley was recently out with a strong view that a recession or a hard landing is inevitable within the next couple, within the next few years. I think he had a horizon until 2024. The inevitable is a big word for a forecaster. But more seriously, where do you see... How worried are you that in part, because monetary policy needs to respond to inflation that is much higher than we all want that we're laying the groundwork for recession before too long?

Charles Evans:

Well, I think this is going to depend on how things play out. That's why my own view is that even with more front loading of our policy increases than the SCP median displayed in March, by the end of the year, if we get to two and a quarter to two and a half, we're going to be able to look at what the state of the economy is. And is it starting to show signs of stress already from those actions or is it off? Is the unemployment rate going down to 3% on its way down to two and a half percent? And by itself that's a good, not a bad thing, but if it's still the inflation pressures are very high, probably means we'd have to do more. And then it would be more challenging, obviously.

Charles Evans:

There seems to be a regularity that when the unemployment rate starts going up by any meaningful amount, it usually ends up continuing to go up and there is a recession. Doesn't have to work out that way, but it seems the case. And I know that Will has argued that type of correlation for quite a long time. And so that probably is part of what he's thinking about, but I think that we have optionality as we are still okay to raise rates at the pace that we're talking about, and we'd be able to make adjustments if necessary.

John:

Great. Thank you so much. Maybe we will take a few questions, maybe starting right here.

Speaker 3:

There are two things which are mystifying markets and investors, and a concern around credit, which sort falls out of them. So the first is that I think the feeling that the equity markets are defying gravity in the face of perhaps growth slowing and all of the effects you mentioned, inflation and the hiking path. And then the second is that the long term forwards in the bond market are still well below your projections. And that real yields are either negative or have been persistently low. And then you've got

your balance sheet runoff, which I guess we're all worried might affect the provision of credit. And so how do you put all of those things together? I'm sorry, there are so many parts to that, but how do you put all of those things together?

Charles Evans:

Well, I think the balance sheet runoff is something. I mean, markets have become adjusted to our purchases and now they're probably going to struggle with the runoff, the private sector's going to have to absorb more of these assets and that could crowd out other types of funding opportunities. I just think that's inevitable and that's what markets are going to have to get used to. Now that always makes me nervous because some point policy makers usually go, "Well, this is the way it's going to go." And this is why monitoring, I think is really very important.

Charles Evans:

Equity valuations, I really don't have anything to add there. I mean, I think that there are just so many fundamentals that have been at work, tax reform has altered things. I think the composition of the high tech goods production and aspects of that. I mean, I just don't do that for a living, but there lot of different things at play. And then obviously the way the bond market is looking at the future.

Charles Evans:

Again, with the expectation and hope that inflation is going to start coming down, some component of it is going to start coming down. You look at some of these five-year ahead projections. And if you take out the first year of inflation and look forward beyond that, it's lower two years it's even lower. So I just think that's sort of consistent with the way so many of us are looking at the dynamics of the price evolution, that could be wrong and it could be wrong for a continuation of all of the supply problems that we've seen, the Russian invasion of Ukraine, the Shanghai lockdown, the ports in Shanghai looking like the ports of Los Angeles, probably worse, and all of that. And how that out, things that I expect to show improvement in the supply chain might take longer, could get worse. So it's just really hard to assess that. And yet levels still seem to be high. Maybe that's the right place.

John:

Back there, please?

Tara Hariharan:

Thank you so much. My name is Tara Hariharan and I'm actually 2022 fellow of The Economic Club, very glad to be here.

Charles Evans:

Super.

Tara Hariharan:

My question regards, how much monetary policy can actually deal with inflation if it's coming from supply side and energy related issues? I know the US has of course much more purpose of core inflation. Maybe not the issue that the ECB has, where it's very much energy related, headline inflation. But I would just be interested in your broad views as to how much monetary policy really can bring down oil and inflation expectation related to oil prices.

Charles Evans:

Well, I think you're right, that when you see these real side factors giving rise to relative price increases for things like energy, very scarce parts of production and things like that, that just shows up in our measure of inflation data. So then standard is to, well, those special factors I don't want to take them out forever, but look at what's underlying that. And so when I look at that, I still see 4% inflation for too much of the basket.

Charles Evans:

The problem remains and is probably likely to persist without getting monetary policy right. But can those technology features lead to ever increasing prices? I mean, that would be worrisome, but it would still be an industry real study. And then innovation being what it is, people, businesses find ways to change production as best they can. Now, you can't just all of a sudden change your natural gas delivery from Russia to Europe and more equivalent of that, but it could take time.

Charles Evans:

But basically I keep coming back to usually the industrial story. There's sort of a limit and there's a relative price that's being sought by the markets, but once it gets to that, it really should keep going up at the rate of inflation. That's the monetary aspect of it, but the longer it persists, the less faith you have in that, and it doesn't make you comfortable with a very low setting for monetary policy. And so that's why I think there's this natural adjustment. And a year from now, I think that we're going to have very different conversations, they're either going to be louder or they could be quieter on the way up or something entirely different.

John: One more question. We can take one more, right?

Speaker 5:

The last question.

Speaker 6:

There hasn't been much discussion on the velocity of money and all what I've been hearing generally, and yet it can be a major factor that impacts the adjustments the monitor base are going to have on the economy. Could you discuss velocity?

Charles Evans:

Well, velocity is... So the fundamental belief of monetarism and the equation of exchange is that velocity is constant. That money demand is stable, and so prices times quantity equals money times velocity, velocity being constant. Then I can look at money growth. Then that tells me all I need to know about how to break that down. Velocity just has been unstable for decades and decades, which means that I don't know how to control forward looking at liquidity and other things like that.

Charles Evans:

Even if velocity were to sort settle down, and this is the financial innovation over a long period of time. And if it sort of settled down, I still wouldn't quite know what to do with it. Since I don't have a track record, then I'd have to build a track record of what that really means for inflation. But I think in terms

of liquidity concerns now, and our balance sheet, you could be looking at the growth of our balance sheet and go, "This, I can't tell you what monetary aggregate I should look at, but this is explosive. Now I've seen enough," but then we turned it around. And the kind of analysis in economic models is that turnaround is fundamental. If ultimately you end up in a spot that isn't this explosive monetary part, then with rational expectation, you shouldn't really price in too much of permanence there. So I kind of look at it that way.

Speaker 5:

Thank you both. This is terrific. A great conversation.