SPEECH

Transcript of Moderated Conversation at UC Berkeley Event, US Economy: 10 Years after the Crisis: November 27, 2017

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William C. Dudley, President and Chief Executive Officer

Carla Hesse:

It's wonderful to see a sea of blue in this beautiful space here, and to be here for such a wonderful occasion. When we planned this event, I didn't think we realized we'd be in such an exciting moment, but I couldn't be more thrilled to be here to have a conversation with Bill Dudley, who graduated from Cal with his Ph.D. in 1982.

I want to mention that he got an undergraduate degree from a very small liberal arts college, and that's meaningful because I think that the depth of having a liberal arts education underneath a very specialized advanced degree really helps people go to the distance in life, and to show the kind of leadership that Bill's career has exemplified.

At Berkeley, he studied with Professor James Pierce, who was a beloved professor, and who I didn't realize until tonight had launched him at the Fed for his first job, having gotten his Ph.D. He then went on to Goldman Sachs and then back to the Fed eventually, in 2009, where he succeeded Tim Geithner. And has been there until now, and now we're in a very exciting moment of wondering where he's going next.

So I'd like to invite him up here and ask him a few questions, and then we're going to be sure to leave some time so that you can have at him too, because I'm sure he has thoughts that you're curious to hear his views on.

I thought we'd just start with the elephant in the room. How disruptive do you think this transition event is going to be?

President Dudley:

I don't think it's going to be disruptive. A couple of things I guess I would point out. First of all, so far so good. I mean the quality of the appointments has been excellent. Jay Powell is a really capable, good pair of hands. I think Janet's done a fabulous job, but if it wasn't going to be Janet, Jay's a really, really good choice to be the Chair of the Fed. And Randy Quarles, who has been appointed to be the Vice Chair of Supervision, is also extremely well qualified for his position. So, if things stay in that sort of vein, everything's going to be really great.

The second thing I would say is that it's a committee. When you think about monetary policy, you are really talking about, if you have a full complement, 19 participants on the Federal Open Market Committee. So it's also important to recognize that changing out one or two people like me isn't going to change what the committee thinks, because it is truly developing a consensus among the committee members that I think is important in terms of driving policy.

Another aspect of this is that the committee really is very united right now in terms of what the appropriate policy path is. So if you look at this summer when we announced that we're going to go and start to normalize the balance sheet, every participant on the FOMC subscribed to the principles of how to normalize the balance sheet over time. There weren't any dissents.

So you change out a few people, but I think the committee is really going to stay together.

The last thing I would just say—two final things I would say on that point. One thing I think is really important is that the Fed's mission doesn't change. We have a mandate from Congress: maximum sustainable employment and price stability. So, whoever you are and whatever background you come from, when you come to the Board of Governors or you become a president of one of the Federal Reserve Banks and then serve on the FOMC, your mission is to try to achieve those dual-mandate objectives. It's not like you can just go off and do something totally different. That mandate doesn't change.

And then finally, it's not just about the principals. People put so much focus on the Chair and the Vice Chair. The Federal Reserve has thousands of really qualified professionals working every day to help make the people at the top well informed and to help in their decision-making. And all those people are still going to be there, they're still going to be working really hard.

So I think people—when you watch the movie "Too Big To Fail," there's no staff in the movie. There's the Bernanke character, the Geithner character, the Paulson character around a table. That is not how policy is made. There's just hundreds of people involved in thinking about what's happening in the economy, what's happening in financial markets. Thinking about various options of how

you might respond. And that's also true in the monetary policy realm.

The staff is still going to be there, they're still highly qualified and very much committed to the mission. So, I'm really not worried at all.

Carla Hesse:

That's great. We're all happy to hear that, I'm sure. So, what I thought we'd do is start with some broad questions, and then we'll hone in and get a little more insider baseball.

The first question I wanted to ask you was about your views of the Trump Administration's policies that are making it more difficult to secure H-1B visas and to limit legal immigration from several countries. Now, what impact do you think this will have on the United States economy, and what immigration policies should the United States have in place?

President Dudley:

Well, we are completely apolitical, so I don't have any views on any policies of the Trump Administration. That said, I think that when you educate people in the United States, you're developing a lot of human capital, and I think it's really logical that you'd want to have that kind of capital stay here in the United States.

I mean, the spots at our leading universities—there are not that many spots. So, if you look at the economics program at Berkeley—when I went there, there were about 30 Ph.D. candidates per class. And about maybe half of them actually finished and got their Ph.D.'s. So, in my class, maybe 15 people actually got Ph.D.'s. Those are pretty scarce resources. If you're going to educate someone to get a Ph.D. in the United States, wouldn't it be better to try to encourage that person to stay in the United States and take advantage of that human capital that you poured all these resources into to develop?

I don't think you want to go quite so far and say if you get a Ph.D., you automatically get to stay in the United States, because obviously you do want to have secure borders. And you do care about any people who might have bad intent with respect to the U.S. So you certainly have to do the appropriate background checks, and things of that sort.

But I think the presumption should be more the default that if you do get a Ph.D. in the United States, the presumption is that you get to stay as opposed to that you have to leave. That's just good public policy, in my view.

Carla Hesse:

Yes, I mean you might be interested to know that the Berkeley Economics Department now graduates over a thousand BA's a year.

President Dudley:

I know it's a very big—I actually spoke to the undergraduates a number of years ago. And it's done in the stadium now.

Carla Hesse:

There are five top-ranked programs in the country, but what really differentiates Berkeley is this incredible multiplier effect of the education that delivers at that very high level. It is a lot of human capital, and precious. So, staying with this sort of broader vein for a minute, I thought we'd ask a little bit about globalization, and what you see are the benefits and risks of globalization, trade, and increased competition.

President Dudley:

Well, we could be here for several hours to really answer that question with any detail. Look, I think first of all, we have to recognize that globalization has had huge benefits for the world. I mean, literally, hundreds of millions of people have been wrested out of poverty over the last couple of decades. So that's number one. That's probably a good thing, net-net.

Number two, I think you have to recognize that globalization has benefits but it also has costs. The benefits for the U.S. have been low-cost goods and services from the rest of the world. But some of the costs in are the adjustment process that has to occur when businesses that were sheltered from competition are no longer sheltered from competition, and therefore have trouble actually carrying on.

I think the big mistake is to think that putting up trade barriers is going to somehow make you better off. I do not believe that putting up trade barriers will make you better off. I think what it will do is it will force you to produce things that you are less good at producing. It will also risk the retaliation by those who you put the trade barriers up to, which will probably make you both worse off.

In terms of the whole debate about the benefits and costs of globalization, I think what we should be focused on is how to reduce the adjustment cost to those that are hurt by globalization, or by technological change.

For all the talk we have about globalization, I think technological change is probably actually more important in terms of the amount of stress it puts on certain segments of our citizenry. And I think we legitimately need to do a better job of helping those people adjust, rather than just saying, "Well, too bad, tough luck. Your plant closed down, you're living in a small rural community, you don't have many prospects for employment, and that's just too bad."

So I think that we need to temper the sharp edge of capitalism at times, and that means workforce development, job retraining, trade assistance adjustment. We could do a lot more on that front, and if we did that, I think there'd be more acceptance of the benefits of globalization and of free trade, and then you'd have a stronger political consensus for the regime in which we have operated for the last few decades.

Carla Hesse:

One more question in this vein of global dynamics and their relationship to the economy. What do you think about the role of U.S. monetary policy in the global setting and its effect on the rest of the world? Is there a need for, in a similar vein, greater coordination between U.S. monetary policy and…?

President Dudley:

Well, there is certainly a need for good communication. I go to Basel, Switzerland five times a year, at least. Basel is where all the central bankers get together to talk about the economy, and monetary policy, and regulatory policy. And that's actually a really important venue because you get to know your counterparts. So, if you're in the middle of a financial crisis, and you pick up the phone to speak to someone, you actually know who's on the other end, and you actually have built up some trust and a relationship with them. So that's really important.

I think that it's important to communicate well and clearly. It's important to have those personal connections. In the middle of the financial crisis, when we were negotiating the foreign exchange swap lines with my counterparts at the ECB, the Bank of Japan, and a number of other central banks—having met the people and having interacted with them on many occasions made it much easier to get to a good place. So it's really important to have those personal relationships.

In terms of coordination, I think there's a limit to how far you can go, though. The mandate that's set for the Federal Reserve on monetary policy by Congress is about maximum sustainable employment in the U.S. and price stability for the U.S. It says nothing about the rest of the world. So you have to recognize that the monetary policy that we pick here is the policy that we think is best for us.

That said, if we do the monetary policy well and we communicate well, we can also minimize the disruption to everybody else.

So, a good example is to compare and contrast the "taper tantrum" in 2013 and 2014 with the balance sheet normalization process this year. When we rolled out the balance sheet normalization process, we were very, very, very cautious in terms of how we communicated and how we actually implemented the program.

We started to talk about what we were thinking about long before we actually enacted the program, and then when we actually pulled the trigger and said we're going to enact the program starting in October, it was a program that built very, very gradually. And it won't be fully in place for another year.

And so, there were no big surprises. And I think that was very, very helpful in making it so the markets adjusted to this change in policy very smoothly.

So we learned some lessons from the taper tantrum. I think communicating clearly, foreshadowing what you're going to do, explaining why you're doing what you're doing, I think can not only be helpful to the U.S. and U.S. financial markets, it can also be helpful to the rest of the world.

Clearly, U.S. monetary policy is important for the rest of the world. What we do in the United States does affect financial markets all over the world. And we want to have financial markets globally that behave more well than badly, and to the extent that we can communicate clearly so that the adjustment process is smooth, I think that's good for everybody.

Carla Hesse:

So, let's move onto the regulatory environment. You had the coverage in the Times, you've expressed some views on this, and maybe this will be an opportunity to elaborate a little bit more on what's been covered already in the Times. Let me just start with asking you about how you view the unfolding of the Dodd-Frank Act. We all know that in response to the recession and financial crisis, Congress enacted much greater regulation in the financial industry. Recently, there have been calls to reassess that decision, and particularly to reassess and maybe even repeal the Dodd-Frank Act—or at least modify it in some form. How effective do you

think Dodd-Frank has been, and can it be improved? Should it be reformed? Or is repeal a justified decision?

President Dudley:

Well, I certainly wouldn't want to repeal the Dodd-Frank Act, and go back to the regime that we had in place prior to the financial crisis. I think we learned a lot during the financial crisis about a lot of inadequacies within our financial system. Banks didn't have enough capital, they didn't have enough liquidity. A lot of over-the-counter derivatives were cleared bilaterally, which created a huge mess when firms actually got into difficulty. We didn't have particularly good oversight of the major financial market utilities. So large, systemically important firms weren't required to have higher levels of capital and liquidity available to smaller firms.

So there's a lot of really good things in the Dodd-Frank Act. Title II basically provides a mechanism though which you can actually resolve a large, systemically important firm, probably in a way that wouldn't necessarily threaten to take down the entire financial system. I think there's a lot more good than bad in the Dodd-Frank Act.

That said, could it be improved? Yes, I think it could be improved. I've been on record saying very clearly that I think that some relief for smaller banking organizations probably makes sense, because small banking organizations are not systemic. A failure of a small banking firm is not going to threaten to take down the entire financial system. So, differentiating between how you regulate large institutions and small institutions I think makes a lot of sense.

Another change is the Volcker rule. The Volcker rule, as it has been implemented, has a pretty heavy hand of regulatory compliance to it. You could probably get most of the benefits of the Volcker rule with a lot less cost. But it's important not to throw the baby out with the bathwater. I think that capital liquidity requirements do need to be higher on a permanent basis for large, systemically important institutions.

I do believe that the central clearing of over-the-counter derivatives transactions actually reduces risk in the financial system. I think it's important to have a viable resolution regime so you actually can resolve a firm or allow a firm to fail without necessarily taking down the rest of the financial system.

I hope in my lifetime we will never have to have the kind of interventions that we had in 2008, with Bear Stearns, Lehman Brothers, and AIG. Those are not interventions that were politically popular. They weren't interventions that were comfortable to do. But it was really a question—I really viewed that officials that were making those decisions had a Hobson's choice, and the Hobson's choice was to rescue the firms to prevent violent failure or let the financial system collapse.

And I think they made the right choice in preventing the violent failure of some of the major financial firms. Because I think if we hadn't done that rescue, I think we would probably have had a Great Depression.

So I think the right choices were made. They just weren't pleasant choices. You need the Dodd-Frank Act to never get to that situation again, where we're forced to make such difficult choices. So hopefully, in my lifetime, we're never going to see anything like this again.

Carla Hesse:

One of the big concerns that is lingering from the way the economy has emerged from the Great Recession has to do with the labor market and employment. And even though the country is now approaching low—record low—unemployment rates, we haven't seen wages bounce back and improve at the same rate that one might expect if you were really in a full recovery.

You touched on this a little bit earlier, but maybe you could amplify a little bit more on how much you would see that as a consequence of globalization and the way in which it's affecting wage deflation in the United States, or changes in the structure of labor markets nationally. And where are we with discussion of the sharing economy? And we'll continue to talk a little bit more in the next question, too, about inequality in a growing economy.

President Dudley:

Well, the unemployment rate right now is 4.1%, which is a low unemployment rate relative to what we've had historically. We think it's pretty much at full employment. And what we mean by that is the level of unemployment where if you go any lower, you're actually going to have, over time, an inflation problem.

But we don't really know precisely where full employment is. So, if inflation doesn't go up, sitting at a 4.1% unemployment rate, that means that you can actually let the unemployment rate go lower still.

A lot of people are sort of wringing their hands about, gee, where's the inflation? We're at a 4.1% unemployment rate and there's no inflation. That's not actually a bad thing. It actually is a pretty good thing, because it means that you should be able to probe, and go to an even lower unemployment rate, which is actually a good thing for all those people that could actually be employed and have jobs and develop skills and grow their human capital.

So, I'm not particularly concerned about the fact that inflation's a little bit lower than our target. I don't really completely

understand why inflation is as low as it is right now. We would have thought that at this unemployment rate, we would be seeing more pressure on wages, and that that would be ultimately filtering into prices. It may just be that it takes some time—that you have to be at this unemployment rate for six months or a year or two years to actually see the consequences for wages and prices. But it's not a bad place to be.

I mean if you told me that you have to live in a world where the unemployment rate is 4.1% and inflation is about 1.5%, and you have to stay there for eternity—most central bankers would say "sign me up." So, it's important not to overstate the degree of the problem.

I think what's going to happen is that the economy is going to continue to grow at an above-trend pace. I think that's going to continue to gradually tighten the labor market further. I think as that happens, we'll see a little bit more wage inflation, and as that occurs, that will eventually filter into prices.

When you look at—people talk about the so-called Phillips Curve. The Phillips Curve is the relationship between wage inflation and the unemployment rate. People saying, well, there's no wage inflation, therefore the Phillips Curve doesn't work. I don't agree with that. If you look at the economy, instead of looking at the economy on a national basis, if you look at state by state, and you look at those states with a lower unemployment rate, you actually tend to have a higher wage inflation in those states with lower unemployment rates. So that's suggesting the Phillips Curve is alive and well, it's just not visible yet on a national basis.

Carla Hesse:

You're not overly worried about what many, many economists—including some of the most notable ones at Berkeley—are worrying a lot about, which is growing inequality?

President Dudley:

Well, I am worried about that. In fact, what I'm worried about— so, people having jobs doesn't mean they necessarily have good jobs. That's problem number one. Unfortunately, the Federal Reserve and monetary policy can't do that much about income inequality and can't do much about income mobility, because monetary policy is really about the business cycle and trying to keep the economy at full utilization of resources.

Obviously, if we keep the economy operating at a full utilization of resources, that will help people—because people will have jobs, and they'll develop skills, and they'll grow their human capital. But monetary policy is pretty limited on this particular front.

I personally think that people talk a lot about income inequality. I actually think the bigger issue in the country is income mobility. The work that Raj Chetty and others have done basically shows that where you are born affects your lifetime earnings. Not what your family's background is—literally, where you live as a child. That's pretty damning. That actually seems fundamentally unfair.

So, I think there's a lot of work we need to do to try to address creating greater opportunities for people regardless of where they're born, who they're born to, did their parents go to college, did their parents not go to college, were they born in the rural South, were they born in New York City. I mean, the differences are quite vast, and they don't have anything to do with the endowment of the individual. They have to do with the native environment—where they were brought up. And I think that really tells you that we have a lot of work to do on this front.

So, I've been talking about this and I think the Federal Reserve is paying a lot of attention to this. We have a research institute at the Minneapolis Fed that's looking at this issue very closely. And we in the New York Fed very much support that work. I think it's hugely important. I mean, the whole American dream is based on the idea that anyone can be very successful if they really apply themselves. We've got to make that true—in fact, not just in theory.

Carla Hesse:

And so, the issue of low interest rates you don't think intersects in any meaningful way, at least for people who rely on, for example, fixed incomes, or the elderly who are relying on pensions?

President Dudley:

Well—look, my mom is 94 years old, and she would like to have higher interest rates. But, the reality is that our job is maximum sustainable employment and price stability, and at the end of the day, I think that the country as a whole is better off having an easier monetary policy and a lower unemployment rate. I think that's more consistent with our mission over time than to have interest rates somewhat higher today, and unemployment higher, because that will probably lead to lower interest rates in the future.

It's not interest rates at a particular point in time. It's interest rates over years and years and decades and decades. And I think the best way you can have the highest sustainable level of interest rates is to get the economy to full employment. And that's really been what our goal has been over the last seven or eight years. And we're finally in the vicinity of full employment. As a

consequence of that, we're gradually now removing monetary policy accommodation, and interest rates are going up.

It'd be really sad to tell people, "I'm really sorry, but I'm keeping you unemployed for a while longer because we need to have higher interest rates for savers." I'm not sure that that would feel right. It certainly doesn't feel right to me.

So, my mom has had to do without. She's doing fine. And I just think that's—and the mandate that Congress has given the Fed—it's maximum sustainable employment and price stability, and so we're following the monetary policy designed to best achieve that mandate.

Carla Hesse:

And so you don't worry, like some people—let's say Ben Bernanke—about interest rates falling so low that it leaves us with very little room to maneuver?

President Dudley:

No, I do worry about that. I mean, this is the issue of let's imagine that interest rates this cycle peak at a relatively low level, 4 or 5%. That would mean that in the next recession, the Federal Reserve wouldn't have that much room to reduce interest rates before you got back to zero. And the issue there then is, OK, what would monetary policy do at that point? Would you have the tools in place to actually lift the economy out of recession?

And that's a legitimate issue. But two things I would say about that. Number one, we have a better toolset today to deal with the zero lower bound for interest rates than we did 10 years ago. We actually learned a bunch of things through this last episode—forward guidance, large-scale asset purchases, open-ended large-scale asset purchases until our goals were actually achieved—which means that the toolset is actually quite a bit better now than it was before.

And it's not as if monetary policy has to do all of the lifting. You can imagine the next recession, fiscal policy can also provide supports to the economy if you're trapped at the zero lower bound for interest rates.

I think that's a real issue. How big an issue it is at this point, I think it's really too early to say. We've only had one episode in history of being trapped at the zero lower bound for interest rates. How often this is going to happen in the future, I think it's really, really too soon to say.

Carla Hesse:

I'm going to ask you one more question, then we're going to open it up, and it's a big question. I'm going to ask you to be brief in your response to it. But it's such an important one, and I'd really be curious to have your thoughts about it. What do you think the work of the Fed in the last decade has had an impact on in the culture and ethics of the business community, the financial community in general? And how do you assess the state of things now? Do you think that there's been a taking in of some of the more—let's call them ethical or cultural questions—that were raised by the financial crisis?

President Dudley:

Look, I think there was a lot of bad behavior in the financial industry in the run-up to the financial crisis, and even in the aftermath of the financial crisis. The classic example I always use is the LIBOR issue, where people were calling up their treasury functions and saying, "Could you change the bid that you submit for your LIBOR submission because that will benefit me in terms of the trading positions I have outstanding?"

Completely illegal, unethical, should never have happened. The treasury function should have said, "No, I'm not going to do this." They should have reported the person to compliance. Compliance should have done an investigation. The traders should have been fired. That's how it should have worked. It didn't work that way on all occasions.

So, clearly there's a lot of work to be done in the banking industry—work on culture, in conduct, and in ethics issues. And this has been a priority for me to talk about this issue over the last number of years, and I think we've actually had pretty good take-up from the banking industry, that they really do understand now that this is important for them. That if they don't address the culture and conduct issue, this could be potentially existential for them.

Because what's happened is, number one, the reputation of the industry has been really hurt, and so it makes it hard for them to attract people, good people, into the industry.

We had a conversation with a number of deans from business schools a couple of years ago, and a number of them said that they have a number of students that won't into the financial services industry because they don't view it as ethical enough. And that's not a really good self-selection process. So, if you're not getting the people that think ethics is important, you're only getting all the other people. That suggests that you have a lot of work to do. So I think that the banking industry now gets this—I mean obviously to different degrees, at different institutions—and I think they're working a lot harder on this issue.

So I think we've made a lot of progress. I think we need to do more, though. I think there could be more industry-wide efforts, where banks actually have a valuation of their culture and ethics, a questionnaire that evaluates—they all have the same questionnaire. They get each other's results anonymously, see how they are doing relative to their peer group, and learn where they actually need to improve.

This is being done in the U.K. There's a Banking Standards Board that's actually doing work on—they actually have a questionnaire and they share the results, and it really allows you to sort of benchmark yourself, "How am I doing relative to others?"

What they've also found is they are getting better, more honest answers. So on the same question asked through this questionnaire that's anonymous from the Banking Standards Board, they get slightly more pessimistic answers than when the bank has just done its internal engagement survey.

So I think that we made quite a bit of progress, but I think there's still more to do.

Carla Hesse:

I'll just circle back to the beginning, saying I think this is another area where educational institutions have to play a really big role. And one of the things that I'm very proud of at Berkeley is the liberal arts foundation. Our business majors have to start in letters and science, and they get a very broad formation before they specialize in any particular technical area. And I just think that this is going to be the long-term solution.

President Dudley:

Can I add just one thing? One thing on that where I think academic institutions can do even better is to embed the ethics stuff in the course material for all the different subject matters. A lot of times the ethics course is off to the side. So, you take your finance, you take your marketing, and then over here is the ethics course. I think you really need that ethics material embedded in each course so that people can see some of the tricky decisions they might be faced with.

Carla Hesse:

I absolutely agree with that. In fact, I wrote a sentence just like that this morning to a member of our advisory board about the need to have very broad domain-specific ethics curriculum, whether it's in STEM or the sciences, where also so many important ethical questions are emerging.

President Dudley:

You know, a lot of them are not black and white. A lot of them are gray. And so, to really draw them out by a particular example, where it's something that's not abstract, I think makes it much more real to people. Just to give you an example about how you can effect change: there's always an issue with cybersecurity and phishing. And one of the things that you want to do is sensitize people to phishing.

So one of the things we did at the New York Fed to sensitize people to phishing is I sent a message to everybody in the New York Fed, with a line in the message: "New York Fed restructuring."

And so that really made people really curious. And so people went in to open the e-mail. And the e-mail had a lot of things that made it very clear that it wasn't from me. For example, in the e-mail my name was signed "William." I never sign my name "William" in an e-mail. I always sign my name "Bill." And there was a bunch of other things. But a lot of people clicked through because they just couldn't help themselves to find out what was on the other side of the "New York Fed restructuring." And I think that was actually pretty effective at making people much more sensitized to the phishing. It's no longer abstract. It's something where they could actually see how they could get fooled.

And so you've got to get people engaged, where they internalize it. It's like the difference between taking a class and auditing a class. I audited statistics in graduate school at Berkeley. It was a prerequisite for econometrics. It was a disaster. I'd nod my head through all of the audit, and then when it came down to when they handed out the final exam, and I had to ask myself to actually answer all these questions, I couldn't answer any questions. Because I wasn't being forced to actually internalize it by the problem sets, and all of the hard work that it takes to understand a subject like statistics.

Carla Hesse:

Yes, learning by doing. OK, so now we're going to open it up, and I see this gentleman right here first. But just feel free to raise your hand. We don't have a roving mike, so if you can, speak up.

Audience Member:

Are you concerned that the increase in debt-to-GDP over the last 16 years in the U.S., but also in other developed economies, is potentially an enormous problem as rates start to go up? And how are we going to get out of that problem?

President Dudley:

I think that your question is well taken in the sense that right now, the U.S. debt-to-GDP ratio is quite a bit higher than it was prior to the financial crisis, number one. Number two, our deficit is quite a bit higher now than it was at the same point in this business cycle during the last cycle. So, in 2007, our budget deficit was 1.1% of GDP. Last fiscal year, which ended September 30th, it's 3.5% of GDP.

And the baby boom retirements and Medicare and Social Security are right ahead. And as you point out, interest rates are rising. So, debt-service costs, which had been held down by the low level of interest rates, are going to rise as we go forward.

So, this is an issue that is going to be a significant one at some point in time. It's really not a market focus at all right now. It's sort of surprising to me how relaxed the financial markets are about the whole issue of fiscal sustainability. It just doesn't seem to be an issue that people are concerned about. But ultimately, debt can't grow faster than GDP indefinitely. So, eventually, you're going to have to get on a more sustainable fiscal track. I have no idea when the market is really going to focus on that point, but it seems to me that that's something that's relevant, not just in the United States, but in a lot of other countries.

Audience Member:

Crypto-currencies: Is it a medium of exchange, is it a commodity, is it a roulette wheel, or is it a tool?

President Dudley:

Time will tell. I'm not going to fixate too much about crypto-currencies, except to say that a good medium of exchange has stable store of value. And it's also widely accepted as a medium of exchange. I personally think the U.S. dollar has those attributes much more than the crypto-currencies that we see outstanding.

I essentially feel like if the Federal Reserve does its job properly, and keeps inflation at a lowest sustainable level, confidence in the dollar as a currency will remain high. And the dollar will do just fine as a medium of exchange.

Is there a possibility down the road that central banks will get more involved in offering digital currencies as a substitute for cash—for the actual physical currency? I think that's something that could happen potentially down the road, and certainly central banks are thinking about that.

So what do digital currencies mean for—would that be a more efficient medium of exchange than cash? With cash, there's danger that you could lose your cash. The cash could get stolen. So maybe there are other forms of currency that might be a better medium of exchange than cash. So I think that's something that central banks should be looking at. I think it's a legitimate question.

Audience Member:

You spoke of the ethical unease among students. Do you think any of that may be linked to the fact that there was not a single prosecution that arose out of the financial crisis? Do you think one day we may look back and rue that even more than perhaps some of us do now?

President Dudley:

Well, I'm not a lawyer, so I don't have a good basis for judging what was actually possible in terms of successful prosecution. The problem, of course, is that doing dumb things is not against the law. Doing illegal things is, and so the question is where is that line between just doing dumb things versus doing illegal things.

But I think that people that have broken the law should be prosecuted and held to account. I absolutely agree with that. I'm just not a lawyer, so I can't really make a good judgment about whether the judicial branch of our government could have been more effective in that realm. I just don't know enough to give you a really informed answer.

Audience Member:

I'm glad you brought up tech and disruption and potential massive unemployment due to tech disruption of the workforce. The response to this has been the idea of universal basic income. What is the feeling among policy makers of this concept, and what are your personal opinions on how it might affect both the country's economy and the world economy?

President Dudley:

Well, before we get to the question of the basic income support, I'm not that worried about technology eliminating all the jobs and us having no employment opportunity—at least not in the near term. I mean, what percent of the U.S. workforce was in agriculture 100 years ago—70, 80% of the workforce?

And now what percentage? It's 1 or 2% of the workforce. It seems to me that there's always new things that come along, new things for people to, new services to provide. So I'm not convinced at all that we're on the cusp of this new thing. We've been having this conversation about what's going to come next for several hundred years now. I'm just not convinced that all of a sudden there's going to be no job opportunities for anyone.

If there aren't job opportunities, presumably it's going to be because we're just so incredibly productive and rich. And I suppose if we're really in that environment, where all the robots are doing everything, the robots are making more robots, which are making more robots, that we're going to actually have a pretty high standard of living.

And so, I imagine in that regime we're probably going to be able to afford something like a minimum income support payment. Right now, to do it would be very, very expensive, and I'm not really sure that people's satisfaction in life would necessarily be higher if they were given minimum income as a choice versus being forced to seek out employment opportunities.

They might in the short run think it's better to just take the income stipend, but I always wonder whether in the longer term, whether the quality of life and how they experience life would actually be better in that kind of regime.

I think the big question, though, in the short run, is just the fiscal costs, which would be pretty large. This is being debated in some smaller European countries right now. I think that if it happens, they're certainly going to go first. I think the U.S. would be quite a bit further behind. And so I think for the people who decide to go down this path, we'll sort of see how it works, and then we'll learn more about how feasible this is in practice. And does it generate the quality of life that the people hope it will.

Because at the end of the day, that's what we really care about, right? It's people having a good quality of life. And it may be that having a stipend improves your quality of life. But it may be having a stipend doesn't improve your quality of life, because it makes your life empty and less fulfilling. So I think it's an experiment, and we're going to have to see.

Audience Member:

My question is back on the fiscal side. This is of course an important month ahead of us, with regard to tax policy. So, it's sort of a two-part question: Do you see a need for tax stimulus to the economy at the present moment, and if you had your druthers and could design a tax policy that would encourage a healthy growth in the U.S. economy, what would be a couple of key features of it?

President Dudley:

I definitely am in favor of tax reform. I'd love to see the tax code simplified. I'd love to see the base broadened. I'd love to see it much easier to comply.

My spouse does our tax returns every year. We don't send them out to an accountant or anybody. And I watch her slave through the tax returns, and I watch how much time it takes to do the tax return. That can't be efficient, it can't be productive. So I think a much simplified tax code with a broader tax base would be very, very desirable. And I think that also applies to the corporate taxes.

So I'm definitely in favor of tax reform. I'm not as in favor of tax stimulus at the current time because the economy, as your question implies, doesn't really need that. So the tricky part, though, is what's the trade-off between if I can get tax reform, but it requires a bit of fiscal stimulus to develop the consensus—is that a good thing or a bad thing?

So I think that the devil is in the details. And so I think everybody has their own view. We'll see actually emerges from Congress. And everyone will have their own view about is that trade-off a good trade-off, or not a good trade-off, in terms of how much is done on the tax reform side versus how much is done on the fiscal stimulus side.

Fiscal stimulus—we don't really need fiscal stimulus from an economic perspective. And as a question before came up, we do have to worry about the long-term fiscal sustainability of the U.S. But on the other hand, if there's a price to pay to get tax reform, maybe that price is worth paying. So I think you sort of have to judge the whole package and whether you think those trade-offs are appropriate or not.

Audience Member:

This somewhat relates to the previous question. What is your view of the movement to increase the minimum wage or the living wage—however one wants to define it—versus unemployment, versus, I don't know, interest rates, whatever—it's kind of a triumvirate of factors.

President Dudley:

Well, I've been very clear for a long time in what I'm for in the minimum wage. It's very simple. I want the minimum wage set as a ratio to the median wage. And none of this, minimum wage flat for X years, and then a debate about how big an increase are we going to have.

If you actually had a minimum wage indexed to some percentage of the median wage—and what that percentage is a political decision that needs to be made by politicians—then you actually would have better plans for businesses. They'd know what the minimum wage was going to be over time—it was going to be X percent of the median wage. And it would also be better for the minimum wage earners, because rather than have a period of fallowness, where minimum wage is stuck at a very low level for a long time, then all of a sudden the minimum wage goes up a lot, they'd be compensated at a fairer proportion relative to the median wage.

So I think that'd be a much better improvement in the regime. The problem with that proposal, of course, is the legislature gets to make that decision once. And that may make it hard for people to reach agreement. I think it's a political decision, where you set that minimum wage relative to the median wage. Different states could decide to set it at different attachment points. That's a political decision.

Congress is not very good about equity. Congress is very good about efficiencies. Telling me that minimum wage should be 50% of the median wage or 45% of the median wage, or 60% of the median wage—that's really a political decision. Congress isn't going to do very well at telling you one is better than the other.

Now presumably, the higher the minimum wage is relative to the median wage, the more there's going to be a consequence in terms of unemployment. And so you're going to have to weigh how you're going to pay that cost in terms of unemployment for having a higher minimum wage.

It's not going to be free. There's going to be a trade-off there, and you're going to have to decide where you want to set that trade-off. But indexing the minimum wage to the median seems to be a definite improvement over the current regime. Better for the minimum wage earner, and better for business in terms of planning what their costs are going to be over time. It seems to me that it's a win-win for both sides.

Audience Member:

Bill, you've done an amazing job. It's probably the system in terms of meeting the mandates of full employment and price stability. But if you were to step back as Berkeley economist and say what should the mandate be—if you had a magic wand, what should the mandate be for the central bank?

President Dudley:

I'm not uncomfortable with the current mandate. I think the current mandate is completely reasonable. First of all, it doesn't really matter what I say. This is something for Congress to decide, and the Federal Reserve is supposed to carry out the mandate.

So first thing is, it really doesn't matter what I think. But I think the current mandate has been really good. You want a little bit of inflation in the system because that actually helps lubricate the wheels of the economy. It helps lead to more efficient allocation of labor resources, because otherwise you have less flexibility in the labor market.

I think George Akerlof and others have done work showing that maybe about 2% inflation is probably better than zero percent inflation, just because it allocates labor resources more efficiently. You also want to have a little bit of inflation because you probably want to be a little bit off the—you want to reduce the risk of the zero lower bound problem. So, I'm very comfortable with 2% inflation as a target.

Audience Member:

What about the full employment?

President Dudley:

I don't think the two goals are inconsistent. I think if the Federal Reserve is doing their job properly, the two goals are actually compatible with one another. So if we go to maximum sustainable employment—and the important word there is sustainable. Yes, you could drive the unemployment rate lower for a short period of time, but that would generate inflation, and then the Federal Reserve would have to slam on the brakes, and you'd be worse off than if you actually stayed at a level of unemployment that was consistent with 2% inflation over time. I think the two goals are very compatible with one another. I don't think there's a huge tension between those two goals.