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DEBT MANAGEMENT IN AN ERA OF QUANTITATIVE EASING: WHAT SHOULD THE TREASURY AND THE FED DO?

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P R O C E E D I N G S

MR. HUTCHINS: Good morning. My name is Glenn Hutchins. And one reason, when David Wessel here in the front, and I conceived of our center of Fiscal and Monetary Policy and Brookings, we wanted to focus on the interaction between fiscal and monetary policies, hence the name. And because we observed that was plainly important during the great recession and had become a central theme of economic policy making in its aftermath. Today we've got a paper that's, we've commissioned, that's focused on one important and I think quite interesting element of that interaction which is, the observation that while the Fed pursue the quantitative easing to take treasuries out, the long term treasuries out of investors' hands, the Treasury's debt managers, who were financing burgeoning fiscal deficits were simultaneously extending the duration of their debt offering, which served to place more treasury long term treasuries in investors' hands. And because the Fed and the treasury had different objectives, they charted diametrically opposing courses. Historically the Fed apparently, the Fed and the Treasury, have coordinated only occasionally and very modestly on debt management. The office explained this is because something I think we all understand, which is that the Fed does not want to be seen as monetizing deficits and the Treasury has taken pains to respect the Fed's independence. However, the pilot paper points out that with policy making at the zero bound, the Fed has taken actions that look a lot like debt management policy and the Treasury has taken steps that can be characterized as a sort of reverse quantitative easing. This highlights and even puts more attention, according to the authors, to ways in which the Treasury and the Fed can coordinate their policies while still respecting each other's turf, and underscores the need to take a view of the consolidated government balance sheet and of the associated optimal debt management strategies. Finally the authors challenge the conventional wisdom, as I suggested, not

surprising for a paper associated with my good friend Larry Summers, by concluding that the case is that the case for short term debt is stronger and the case for maturity extension weaker than is generally assumed. They assert that given the substantial savings, stimulative impacts and financial stability benefits attendant upon short term borrowings, the Treasury should finance at the short end at almost all times. I'm going to have a question about that later on by the way.

The terrific paper was written by Robin Greenwood, George Gund Professor of Finance and Banking at the Harvard Business School, my alma mater, Sam Hanson, Assistant Professor at HBS, Josh Rudolph, who recently earned a Master's Degree in Public Policy at the Kennedy School at Harvard, and Larry Summers, who needs no introduction, but we should point out and thank him for serving as the Co-chair of the Advisory Council for the Hutchins Center. Speaking of the Hutchins Center, I think, our Advisory Council, we have at least one of our Advisory Council members here, Ruth Porat, also Steve Cicchetti, from Brandeis, where are you Steve? Over here, and I think that's it. Any other Advisory Council members here? Oh there he is -- Bob. I'd heard -- you had your name on my list but I didn't see you. And Bob Reischauer from Urban Institute, thanks for coming.

So to begin with today, Robin will summarize the paper, copies of which are available here today and for those who are on the -- who are live streaming on our website, Robin will then be joined up here by his co-authors, plus David Wessel for the initial description of what's in the paper. After that, we'll have responses from two leading private market participants -- Jason Cummins from Brevan Howard and Lou Crandall from Wrightson. We'll coffee break, and then we'll hear from two important public sector officials, Jay Powell from the Fed, Governor, and Mary Miller, who until just a few weeks ago was the Treasury Secretary for Domestic Finance. After that, they'll all come back

up on the stage and we'll have discussions and questions. So Robin, the podium is yours.

MR. GREENWOOD: Thanks so much and thanks especially to David Wessel for urging us to write this paper and to think hard about these issues. So it's been really interesting for us. So what do we mean by debt management? By debt management, we mean really something very simple, which is the choice of securities that is issued on a consolidated basis by the Federal government. And when I say consolidated basis, I mean that we want to think about the private owners of those securities and what, at the end of the day, those private owners have to hold. So what do we do in this paper for -- we do four things. First, we're going to start by trying to quantify, if you think about government and debt in these terms, how the Treasury and the Fed have been working at cross purposes during the most recent era.

Second, we're going to provide a little bit of a historical perspective on the Treasury versus Fed question and then I think we're going to spend a bit of time thinking about a modern framework for debt management. And the way we're going to do this is we're going to try to put the debt managers' choice in an economic framework and try to add the modern considerations of aggregate demand and financial stability to the equation. And then last, we're going to come back to the motivating question for this paper, which is ways to resolve the tension between the Fed and the Treasury, and the conflict over debt management during the most recent period. And I should say, just like any paper with four co-authors, I'm only going to say things today that the four of us have agreed on.

Okay, so let me start. So the first thing that we do is we try to put in common units what the Fed and the Treasury have been doing over the past five years. So what has the Fed been doing? The Fed has been buying long dated securities, at the

same time that the Treasury has been expanding the supply of long dated securities. The Treasury has been doing that, it's really two components. One is, they have been running deficits and financing those deficits, so the overall stock of debt has been expanding. Number two, they've been extending the maturity of the debt. So how do you put these things in common units. Well, we chose to focus on the amount of interest rate risk that is being borne by the private sector. And so the way we do that here is we essentially convert the Fed quantitative easing program and the Treasury's maturity extension into ten year equivalents. And the reason, so that's going to capture essentially the amount of interest rate risk that's being borne by the private sector. So this is our attempt to do this for the Fed. So here we're combining not just the Treasury long dated Treasury securities that the Fed has been buying but also the agency and MBS securities, and here we've scaled everything by 2014 GDP and you can see that expressed in these units, the Fed has purchased 15.6 percentage points of GDP of ten year equivalents, okay?

Over the same time period, the Treasury has been extending the maturity and has bought the equivalent of 5.6 percentage points of GDP of ten year equivalents. Okay? So just on this basis, you can see that the net impact has been diminished by about a third from the Fed's perspective. Now just to be clear about this, what I've included in the picture so far is just a policy variable of the debt management policy variable. So that is to say, we don't think of debt management as having a say on the overall stock of debt, so that really is decided by Congress and so if you include that, it becomes even more extreme and so here, I'm showing you as well the impact of the rising debt stock and so you can see, expressed in ten year equivalents, the total amount of increase is 25 percentage points of GDP. Okay?

Now this is what motivated us to write this paper. Now if you think about

the motivate -- let's just take a pause for a second and think about the motivation that each of these agencies have expressed for these actions. So if you ask the Treasury why is it extending the maturity of its debt, they say that as these stock of debt expands, the concerns about rollover risk and refinancing risk have been looming large, and so it is prudent to extend the maturity of the debt. At the same time, if you ask the Fed what they are doing, well they are stimulating aggregate demands, by reducing the amount of long term securities in private hands, okay? Now you can see that, and this picture makes abundantly clear that reducing the supply of securities in private hands is at least partially undone by the actions of the Treasury. From the Treasury's perspective the concerns about rollover risk of course, the Fed has to remit any profits or losses to the Treasury, so from a consolidated basis, both of their motivations are coming into conflict.

We attempt in the paper to talk about the market impact of these two things. Now how do you do that? If you go back to this picture, the Fed's objective is to increase, or reduce the supply of securities in public hands, thereby affecting the yield on long dated securities compared to short dated securities or in other words, reducing the term premium. And if we go by conventional estimates of how effective QE has been, they've had the effect of about 1.37 percentage points so again just rescaling our picture, the Treasury's maturity extension may have offset as much as a third of that. Now again, that's going to be highly contingent on how one assesses the quantitative impact of the purchase and sales.

Now turning to the historical relationship between Fed and Treasury, we dug into this a little bit and this is a picture that tries to show you on the, above the zero access here, you've got the composition of Treasury securities, just like I did in the other picture, I have rescaled everything by GDP here, okay? Just so that you have a sense of the magnitudes, and so here you have short term debt, medium term debt, here defined

as being between one and five year maturity and then greater than five years and then you have the Fed portfolio below the zero axis here. And I would say the main -- our main take from this picture is that the Fed, from a debt management perspective, there really hasn't been much more than a wrinkle, okay, up until 2008. No you might say even in 2000, the Fed was more involved during the World War II era, but even here, compared to the overall stock of debt during that time, there wasn't a huge impact. The other wrinkle in this picture that's hard to see, but I'll draw your attention to, is in 1961, there was this Fed and Treasury coordinated action known as Operation Twist. What's interesting about Operation Twist is that it's much like the situation we find ourselves in today, in that the Fed faced constraints on the short term interest rate, and decided to purchase long dated securities, so much like quantitative easing, but unlike the most recent period, the Treasury cooperated with the Fed and reduced the amount of long term securities and increased the amount of T-bills. So the Fed and Treasury were operating in unison during that time. Now again, it's a blip in this picture, which is to say it really wasn't as much of an issue as it is today.

So let me turn to the broader question of the paper, which is how to think about debt management. So traditionally, Treasury -- the way we interpret Treasury statements about debt management is as saying that they balance two forces. Number one, the Treasury aims to lower the overall cost of financing the government, and number two, balancing that is that they want to limit fiscal risk. So lowering the cost of financing, that typically as I'm going to show you would favor short term financing of the debt and limiting fiscal risk as I'm going to describe, typically would favor long term, and we think of the Treasury as oft, those two forces as essentially determining optimal debt management policy.

Okay, so let me get into what these forces are. So what does it mean to

issue cheaper? Well, it's to choose securities that have the lowest overall cost of financing the government, and there are sort of two things that the government needs to look at here. One is, how cheap is it to issue short term T-bills? What I plotted here is the liquidity premium on short term T-bills, so what does that mean? It means relative to the private cost of financing, in the short term, how much cheaper is the Treasury getting short term financing, right here. And you can see two observations. One is, this premium for short term debt moves around quite a bit over time, and number 2, on average it's positive. In other words, on average, it's cheaper for the government to issue short term securities. That picture focuses quite narrowly on the treasury bill market and very short term bills, but if you take a broader perspective, you could say, well, generally it's more expensive to borrow long term, so generally the government might want to consider avoiding some of the term premium, meaning the difference in yields between the long term securities and the shortest dated treasuries. And what I'm plotting here, I won't get into the details of how this was calculated but this is an estimate from some other authors of the term premium on ten year zero coupon treasuries. Again, this is a series that moves around quite a bit over time as you can see, but on average, it's very clearly positive and if you go back far in time, it's very clearly positive for a very very long period of time. So in other words, there are some pretty strong forces in terms of cost savings we think that would suggest that the government issue short term.

Okay, on the other side of the teeter totter, is fiscal risk. So what's fiscal risk? I think the government really has in mind two sorts of things when they talk about fiscal risk. Number one, they are thinking about refinancing risk, and what does that mean? It means, if you issue a lot of short term debt, then you're exposed to changes in interest rate. So for example, consider the extreme where you were to roll over overnight bills every single day and the entire government was financed using overnight paper.

Well of course, if interest rates spike, that's going to have a dramatic effect on the deficit. All right, on the flip side of that, if you issue long term, you're going to lock in the cost of capital essentially -- same kind of logic that corporations often use when deciding between short and long term debt. The other form of fiscal risk is what people call rollover risk, and here people mean very different things, and we take it to mean, the concerns about a failed auction, or maybe some kind of self-fulfilling bank run, the kinds of events that have happened in Europe over the past few years. So we think of those things as being a little bit distinct from re-financing risk per se, but perhaps related to some extent.

Okay, so once you -- if you buy into this basic trade off as a view of government debt management, then how does this change over time? So how does the government change its debt management plan as circumstances evolve? Well the most obvious think is that when deficits are rising and the overall debt burden is larger, then fiscal risk looms larger for the government and so what does that mean? That the government would naturally lengthen when the debt is high, and actually, it turns out if you look at the historical data that seems to be remarkably true so when the debt to GDP ratio is high, there's a very strong tendency for the government to lengthen its maturity. In other words, what the Treasury has been doing over the past few years, is not unlike what they have been doing every time deficits have started to ramp up and the debt stock has increased. So I think the overall correlation here is in excess of 80 percent if you look at the post accord years.

So I think one of the major contributions of the paper is to ask, how big is fiscal risk? It's clearly something that debt managers worry about. And we wanted to think about, is it -- do they worry appropriately about fiscal risk or are their concerns perhaps somewhat overblown? So we did an exercise in the paper and the exercise is,

we said let's start in 1952 and suppose that the government, instead of taking the financing plan that they've actually taken, which is to say they relied on a mix of short and long term securities. Suppose that they actually have just rolled over three month Treasury bills and so they just were exposed to fluctuations in the interest rate in the course of shifting towards short term financing. How bad would that be for the government? That was our basic question.

Now we know from the pictures that I just showed you, that there are some benefits to doing that, so over the past fifty years, the government would have saved a lot of term premium in doing that. And we go through in the paper how much term premium they would have saved. We're not trying to say that the amount of term premium they saved on a historical basis would be the same going forward but we do think that there's some term premium out there for them to grab. But on the flip side, how risky was it? And this picture actually, this picture shows how risky it was and the short answer is, not very. So what I'm showing you here, the blue line here, is the actual path of deficits that the government incurred over time. So what does that mean? The government has a primary surplus or deficit, plus they have whatever is associated, the cost that is associated with rolling over the debt, and you can see that here.

The red line here is the deficits on the counter factual case that we simulated in which the Treasury rolled over three month Treasury bills. So I think many of us have the intuition that if the government did that -- wow, that would be extremely risky, and that's right. The burden associated with interest on the debt, the fluctuations in that go up quite a bit when you do this. But what this picture shows is they go up quite a bit, but not compared to the overall volatility of primary deficits. So they really barely move the needle in terms of the overall budget volatility. So in other words, if we go back to this trade off that we were proposing, the trade-off would say that well, the forces

favoring short term debt are stronger than we might have supposed and the forces favoring long term debt, they don't seem to be that strong in the data.

So let's go back to this. So what is modern debt management? We wanted to add two things to the set of trade-offs here. So financial stability and aggregate demand -- so what is aggregate demand? Aggregate demand recognizes that the Federal Reserve is also in the business of debt management and can influence, through changing the net supply of long term securities in private sector hands, can influence a term premium, so increasing aggregate demand here means essentially on a consolidated basis, issuing more short term debt, or alternatively, the Fed buying long term debt, and then financial stability. So what do we mean by financial stability and how can the government promote financial stability through debt management? Well the same forces that make it attractive for the government to issue short term debt, make it attractive for the private sector to issue short term debt. Now in the event that the government wants to dissuade the private sector, and particularly some financial intermediaries from issuing short term, the government may have a role in essentially crowding out private sector short term borrowing here.

Governor Stein of the Fed described this as kind of getting into the cracks. What he means is that the government, through changing the price of short term debt, the relative attractiveness of short term debt, relative to long term debt, you can change the willingness of the private sector and financial intermediaries to issue a successively short. We discuss this at more length in the paper. We think of this as being a potential complement to regulatory solutions to financial stability.

Now what's the conflict? Of course, the conflict here is that traditionally, the Fed has been in charge of two of these four objectives, financial stability and aggregate demand, so the Fed in combination with other regulators. And the Treasury

has inherited the other two, which is financing the government at the lowest cost and limiting fiscal risk. So what are the conflicts? Well, at the zero lower bound, it's pretty obvious. We showed you the picture already. The Treasury is trying to extend average duration to mitigate fiscal risk, meanwhile the Fed is trying to shorten the average duration in private hands, to bolster aggregate demand, essentially, they're in direct conflict over their objective functions. We go through a case in the paper, I won't spend the time today, to show that they're actually more general circumstances in which the Fed and the Treasury can be at odds, and in particular, during times when the Fed is trying to contract the economy by raising interest rates, that can actually induce a motive for the Treasury to issue short, in which case the Fed and Treasury are actually again working across purposes.

Now you might say, outside of the zero lower bound, the Fed could sterilize the debt management. So what does that mean? Well, essentially, the Fed gets the last word because it sets the short rate. So let me just be very explicit about that. That means that suppose the Fed was trying to be expansionary and the Treasury was using debt management in a way that ended up being contractionary, event if not by design, the Fed would be able to lower the short rate, more than it might have otherwise done. This is what we mean by sterilization. Now sterilization is impossible at the zero lower bound because the Fed has lost control of the short term interest rate, and so at the zero lower bound, and perhaps more generally the Treasury and Fed need to coordinate. The solution that we put forward in the paper is that the Treasury and Fed release an annual joint statement on the combined public debt, debt management. Really what we have in mind here is that each agency needs to internalize the other's objectives. And the other thing that we add here is that the Fed we think is probably, should be charged with routine tactical adjustments because of their expertise in open

market operations. And I'm out of time. I'll stop there.

MR. WESSEL: Let me start by thanking Glenn for that nice introduction and to particularly thank the authors for all the hard work they did on this paper. I'm new to this business of academic papers and let's just say there seems to be a lot more back and forths than there was, even on the average Wall Street Journal front page story and as John Hilsenrath tells us, quite a bit of back and forth on that. We of course have Larry Summers, Robin Greenwood, Sam Hanson, all from Harvard, and Josh Rudolph who was a student at the Harvard Kennedy School when this work was done. He's now at the U.S. Treasury, but neither he nor Larry Summers are speaking for the U.S. Treasury today. I want to put that on the table.

Larry, I wonder if I could just start with you a little bit. I mean, this is a very provocative paper. I think it makes two really interesting points, provocative points. One is that during the period of quantitative easing, the actions of the Treasury, both the extension of maturities and the size of the borrowing offset a lot of the quantitative easing and the second is a more general point about, when you think about it, maybe the Treasury is making a mistake by trying to go long when it should be going short.

But Larry, I've read at least a dozen op-ed's in which you have made the case that with long term rates being so low, the government ought to be borrowing a lot long term and investing that in infrastructure. So how do you -- is that -- how does that fit with this argument?

MR. SUMMERS: You're going to require consistency.

MR. WESSEL: I don't require it. I just want to watch you try to explain it away.

MR. SUMMERS: It's really going to be much too difficult. I'd say a couple things. First, even if the government borrowed long term, which at least at some

moments has been ex-ante more expensive, I think infrastructure pays off hugely and if there are better ways to borrow, then the extra surplus from investing in infrastructure is even larger. Second, if you looked at Robin's slide most of the way through, about two-thirds of the way through, he showed an estimate of the risk premium on ten year treasuries relative to the risk premium on three month bills. And a number that had basically been highly positive had moved to being in the negative range. And so, yes, the case when I was writing that most virulently, when the ten year Treasury rate was below two, the case that if you're a hedge fund you should carry trade was very weak, and conversely, the case that if you were the Treasury, that was probably not the moment to maximize the tilt towards the short rate. And the third thing that I was frankly trying to make it more acceptable, what I thought was really important was the infrastructure investment and there was already anxiety out there about more borrowing and those who were anxious would feel less anxious if the borrowing were long term rather than short term. So that's why I used a comparison. It just seemed to me that it was much more compelling to say that Kennedy airport was -- repairing Kennedy airport had a very high payoff relative to the ten year borrowing rate with a thirty year borrowing rate, than the say Kennedy airport had an even higher excess return relative to my judgment and my reading of the market evidence of what will likely be the cost of rolling over short term debt over the next 10 to 30 years.

MR. WESSEL: Sam, maybe I can --

MR. SUMMERS: I don't think you got me fully there.

MR. WESSEL: It was fun to watch though. Sam, let me bring you into the conversation. So I've described this paper to a number of people who are not familiar with the debate in which you, and a number of them have made the same point, which is, if it made sense for a corporate treasurer to take advantage of very low long term rates,

why didn't it make sense for the Treasury to do that same thing, setting aside that it was offsetting quantitative easing, for the moment. Why is not the debt manager doing exactly the same thing as the corporate treasurer in locking in these extraordinary low rates and what's wrong with that?

MR. HANSON: I think the, as we've framed it, traditional debt management, is a lot like the way that a traditional, you know, the way that a corporate treasurer would look at borrowing. On the one hand, they want something that's cheap. On the other hand, they're kind of, there's sort of some prudential concern with minimizing volatility. So I think if you look at it, in isolation, you would say listen, long term rates are really really low. Term premium are really really low. Right now is a good time to go long. I think our key thing is that that makes sense when I only think about kind of these two specific objectives. The point is that the government on a consolidated basis has this additional kind of third objective, managing aggregate demand, so yeah, it's really that we kind of can't have our cake and eat it too, partially because the government itself is trying to control the long rate.

MR. SUMMERS: But just to add slightly, because I worried a lot about that in coming to this recommendation. So the first part of the answer is that there are the two factors that are important for the government, but not important for a corporate treasurer, which are, you want to stimulate aggregate demand and you want to provide a supply of safe short term liabilities. People want safe short term liabilities. If they hold Treasury bills, it sort of works. If they hold bank deposits or money market funds, those liabilities are in turn going to be matched by something else which as we've seen, gives rise to the possibility of instability. So there are two substantial externalities that the government should reflect. That's the first part of the answer.

Second part of the answer, and I guess one could have different views

about this, in a world where less than a tenth of the companies who are in the S&P 500 in 1980 are still in the S&P 500 today, a company has to think about the prospect that it can borrow cheap today, but who knows what its credit and what its access to the markets will be 30 years from now. The government can rest on a much more secure foundation. Now, you'll be tempted to say, yeah, bozo, as long as we don't follow your stupid advice, and get ourselves caught --

MR. WESSEL: We'd never say that.

MR. SUMMERS: Get ourselves caught borrowing short with so much to rollover, and that's why I found the simulation that Robin showed so potent. Here we've had a pretty tumultuous era. You know, rates went up 18 percent, rates went up to 20 percent, you had inflation, you had deflation, you had all this stuff and basically all the reduced volatility that you had gotten from long rates was basically a pimple relative to the volatility that you were getting in other ways. So that's why I think there's a different kind of view.

MR. WESSEL: Robin, let me ask you a little bit about how monetary policy works at a time of QE. So you make the case that you should look at the government's consolidated balance sheet and there's a supply of long term, a supply of treasuries and the Treasury and the Fed are basically doing the same thing and as you point out, Operation Twist they did it exclusively this time. There seems to have been no coordination at all. But isn't it, and you mention this in the paper, maybe quantitative easing doesn't work through changing the supply of treasuries in the hands of the long term debt in the hands of the treasuries. Maybe it works through signaling, this notion that by buying all these treasuries that the Fed is conveying to the markets its determination to set interest rates low far into the future. So if it isn't quite as hydraulic as your model suggests, does that -- how do you factor that into your thinking?

MR. GREENWOOD: Right, so we spent a lot of time as the authors debating this very question. I think with signaling there you really -- you want to separate it into two components. One is, when the Fed announces QE, it's also revealing the willingness to do additional QE into the future. So it's revealing its policy function. And so that, while it's not hydraulic in the same way, it's not that you think they're going to buy tomorrow, it does tell you something about their willingness to buy bonds in the future. So that's much like the channel that we're describing. Then there's a second channel which is that maybe there's also a piece of information in what they're doing, about their willingness to keep short term rates low in the future. So one, the Fed has actually explicitly said that they're willing to raise short term rates while maintaining a larger balance sheet, so we're not, while we've heard that critique, we're not sure how large it looms in what the Fed has been trying to do. And then with regard to the former, we still have this issue with the Fed and Treasury essentially operating at cross purposes. So I think again, it's about sort of thinking carefully about what we mean by signaling.

MR. WESSEL: Josh?

MR. RUDOLPH: Yeah, so following up on that same point. I'm reminded of some advice that Larry gave me as my thesis advisor to make sure I always separate out the observed facts from the speculation about what might be driving those facts. So in this case, in addition to our central finding about the working across purposes, we also in the paper show a data point which is that over the five quarterly refunding dates in 2009 and 2010 when the maturity extension was announced, on each of those five dates, interest rates rose by five basis points on average, which is what you would expect, but the amount was only about half of what you might expect if you knew the amount of the maturity extension and predicted how much rates would go up based on the announcement effects observed from QE. So this is the point where we depart

from the observed facts and then we start to speculate. Why would that be? Why would it seem that the Fed might be able to get twice as much bang for their buck, announcing the same dollar of duration as the Treasury announces and the range of conjectures goes from the more prosaic interpretations about maybe the Treasury policies are easier to predict or maybe those problems with the event studies? Perhaps the most natural signaling explanation is that the Fed is sending signals about its future short term interest rates, although the estimates that Robin showed that some authors have provided of the term premium suggest there's more to it than that. It was actually the term premium, not the expected short rates that were moving. So that leads us to the last set of conjectures that maybe the two institutions send different signals about their future balance sheet operations, and there's both a rational and an irrational version. The rational version of that is maybe the Fed sends the signal that we're here on the case; we're going to do whatever it takes, whereas the Treasury sends a signal of a one-time adjustment. The irrational version is perhaps, over the years, the Treasury debt managers have done such a good job of convincing the market that they're going to be regular and predictable that investors have kind of been lulled into a sense of complacency when reacting to the refunding documents. All that's just speculation and it's very difficult to draw any conclusions, but it's certainly a keen area for further research.

MR. SUMMERS: Re-capping slightly the internal debates we have, let me say three things. First, those of you who are concerned about financial aspects as distinct from the policy aspects here, if you want to remember one thing from this paper, it's this. During the vaunted era of QE, the stock of long term debt that the market had to absorb rose massively. It did not shrink. It rose massively. All the people who are saying, well, there weren't any long term bonds, people had to buy stock so there were bubbles, the fact is, the amount of long term debt that people had to absorb rose

massively. So analyses in the hydraulic tradition and in the supply and demand tradition do not capture what was going on because what the Treasury was doing between its debt policy and the fiscal policy of the country, fundamentally substantially exceeded QE. That's the number one financial point to make.

Having said that, it is certainly true that as the Federal Reserve has carried on its QE policy, there have been a variety of signals sent in a variety of ways, both with respect to the future of the Fed funds rate, and with respect to the future of QE policy and those certainly have had impacts on interest rates. It is close to defying belief that a more successfully coordinated Federal Reserve and Treasury policy modeled in some ways after the ways the Treasury and Fed coordinate on the foreign currency intervention they used to do, a more successfully coordinated policy would hardly deny the Fed the ability in a million different ways to send signals about its future monetary policy intentions. And so, yes the signaling aspects are surely important in understanding the history and yes, I would relate to an argument to preserving an ability to signal future intentions was a useful thing to do, but judging by how many people were, how many more cameras would come if Janet Yellen were to join us and announce her intentions to share her thoughts about future policy. I think we can safely assume that the Fed is capable of giving signals with respect to its future intentions, even with a more rational regime around coordinating debt and fiscal and monetary, debt management policy.

MR. WESSEL: Okay, let's leave it there for now, because we'll come back. I have some more questions. I'm sure you do too. So the plan now is for you guys to step and take your seats and for Lou Crandall and Jason Cummins come up and join me. Don't forget to leave your mikes on the chair. Soon the world will have wireless mikes. We're not there yet. While Jason and Lou are coming up, why don't you come over this way? Let me just quickly, you have their bios, but let me just tell you why we

invited them. One of our goals here is to have -- is to not limit our conversation to just people in policy circles or just people in academics or just people in the markets but to try and get some interaction so we invited Jason Cummins who's at Brevan Howard, in part because he's thoughtful on these issues, in part because he has worked as an economist on the staff of the Fed, and importantly, he's one of the people from the markets who advises the Treasury on the Treasury Bond Market Advisory Committee and I guess I should say that you're not speaking for the Treasury any more than Josh or Larry was, right? And Lou Crandall is at Wrightson ICAP and he's been watching the bond market, watching the Fed for longer than I've been in Washington and so I thought he had kind of historical perspective, which is interesting in the paper, because the paper talks about how this notion that the Treasury and the Fed don't speak to each other about these things is not one that's as prevail over all time. So Jason, can I ask you to start and then we'll turn it over to Lou?

MR. CUMMINS: Yeah, with pleasure. So I really enjoyed the paper. I thought it was terrific work and I think the Hutchins Center as led by you and Louise is doing a fantastic job. And I'll quickly move on to the comments on the paper where I'm going to disguise my enthusiasm for the paper with a few criticisms for a considerable time in my comments and then I'll move back into some of the things that I agree with more in the paper. I don't know if we have the picture that I wanted to start out with, a bit of a story. So this is my one prop.

MR. WESSEL: Coming. Wait a minute Jason.

MR. CUMMINS: My picture is a prop from Federal Reserve history that some of you may know and appreciate, but I want to use that picture to help crystallize some of your thinking about, I think one of the key issues in the paper which is this discussion of how the Treasury and the Fed can coordinate in order to try and affect

aggregate demand and that I think is -- okay -- so does anyone know who that is? Bill Martin. So he's got a building named after him at the Fed. And the inscription is, to my friend Bill Martin, just after the battle mother, LBJ. So a lot of people know some features about Federal Reserve history, but this is a particular episode that I think is salient to the discussion and the paper today. So here's what happened to Bill Martin. In the fall of 1965, it was the 58th month of the expansion seen after the Kennedy tax cut, so it was an expansion that was getting fairly long in the tooth, and there was a need to raise rates. Inflation had gone up, inflation and expectations had gone up and Martin had gone to the President in much the fashion that this paper argues, is optimal, and apprised the President of his intentions. So in particular, in his biography, Martin says he ran the Fed by making certain that the administration was appraised about the thinking within the FOMC. And you'll see an echo of that on page 29 of the paper, where the author has proposed essentially an informal compact between the Treasury and the Fed, much as was run in that era.

Well, LBJ didn't like that and he said, quote, "I'm scheduled to go into the hospital tomorrow for gall bladder operation. You wouldn't raise the discount rate while I'm in the hospital, would you?" And Martin replied, "No, Mr. President, we'll wait until you get out of the hospital." And then he raised rates just after the President had been released. And LBJ of course went volcanic and he said, "How can I run the country and the government if I have to read on the news service ticker that Bill Martin is trying to run his own economy?" Martin was summarily called down to the LBJ ranch. He was greeted by Lady Bird who even got into the act and she said, it was a longer quote but here's how she introduced her thoughts -- "I hope that you have examined your conscience." At the ranch, Martin received the full LBJ treatment. The President asked the Secret Service to leave the room. And then he actually began literally pummeling the

Fed chair, shoving him against the wall, saying, "Martin, my boys are dying in Vietnam and you won't print the money I need." Eventually he did. And we know that that led into a history in the 1970's that is more familiar with the Burns chairmanship, which shared many of the similarities of a perhaps too close Presidential and Chairmanship accord. I see really little difference between what the authors are proposing and some of these episodes in the past, and indeed, if you look back over U.S. history, there's an example in each of the decades, up until Volcker established the defacto inflation targeting Central Bank that we enjoy today, where this was a problem. It was a problem pre-Treasury Fed accord. You can go back and read the history of this. Mary might mention a little bit of this in her comments. It was a problem in the 1960's as I've just described and a very serious problem in the 1970's. The welfare loss from these experiences was extraordinary. Absolutely extraordinary, in terms of the inflation that the United States suffered.

So these examples are certainly not unique. They have occurred in U.S. history when we didn't have an independent central bank, and I think the authors are not completely either deliberately or accidently completely forthright about the experiences seen very recently in other economies, where the Bank of England, which doesn't enjoy the same long history of central bank independence compared with the defacto independent central bank after Volcker's establishment of low inflation and credibility. The Bank of England had to send the debt management office of their treasury a note saying, you absolutely cannot do anything to respond to the way we're behaving, in the event people will draw the impression that we're going to monetize the deficit. And all of the policy makers on the committee there have said that as soon as we have the opportunity, we're going to sell the debt that we bought because we want to maintain credibility in central banking.

So what's the connection to the paper? The authors argue that the Treasury and the Fed is one important argument in the paper, but the Treasury and the Fed should cooperate on debt management based on what they call the overall national interest. But generals are always fighting the last war in my view. So while it may seem like the Treasury Fed aggregate demand management is sensible in light of what we've been through over the last six or seven years, it's not that clever an idea if you put it more firmly based in its historical evaluation. It's been indeed responsible in my view for some of the worst mistakes in monetary policy history. So I think it's frankly just dangerous.

There's an alternative as well. If aggregate demand management is so important, for example, when you have to do monetary policy at the zero lower bound, then the Fed can just do more. I think reasonable people can have a debate about the following statement but in my view the Fed could have done, you know, five trillion on the balance sheet, six trillion, seven trillion, and thereby if necessary, undone whatever the Treasury had been doing in terms of its debt management operation. So the authors argue that this is somehow second best, that the Fed would be undoing what the Treasury is doing in terms of debt management, but I would point out to you there's no theoretical proof for that paper, absolutely no empirical evidence of it and I think it's much more important to understand why the Fed has be a credible central bank and this separation is a key element of doing that.

Let me just quickly make another couple points to give a fair hearing to the parts of the paper that I think are terrific. So the first one is, it shows the case for short term debt is stronger than the case for maturity extension. I think that's quite sensible, as a matter of financial stability, Robin didn't go into it as much as perhaps some of his prior work has that additional short term debt is likely to enhance financial stability. That's a very important point. I think I'd just concentrate to make one comment

on the first idea. The model seems and feels incomplete to me. There's a discussion of what the TBAC has emphasized as kind of our qualitative reasons for why maturity extension is desirable. We said in past documents that there's the potential for inflation or higher interest rates, some rollover risk vaguely defined. I don't think we have in mind this idea of missing an auction. It's something more pernicious than that. But the model generates only tiny welfare cost issuing only short term debt. And that's from the failure to smooth taxes over time. It's almost a second order effect. So something is missing in the model importantly. And I'll just riff on what I think is missing. I think what's missing is kind of a broader appreciation of what debt management is all about. Put simply, there's no real explanation for why we have debt in this model. It's not some kind of up and down business cycle thing where we have a balanced budget over time. We have debt because we run a chronic current account deficit and we have to, although treasury would never argue for this, we have to in some sense be a little bit sympathetic to our creditors as clients out there who want to manage their exposure to us. So I think there's something more important in there when we talk about the balance maturity structure and the regular and predictable issuance. I think that ensures that the Treasury department is creating in our sovereign debt, the risk free benchmark and using as these kind of regular and predictable and balanced maturity structures, ideas in order to support that. And I think that also helps promote the U.S. Dollar as the reserve currency. So both those things are tremendously important. They have pecuniary and non-pecuniary benefits which are hugely important to society beyond any of this kind of second order tax smoothing. So I think what you need in the model is something that balances the opportunistic ability to get away from the term premium with this kind of longer term benefit derived from reserved currency-ness and being able to get our clients overseas happy with what we're doing and certainly you would have seen that in Mary's team, what

they described as what people go out and tell them when they were in the financial crisis or even nowadays, they want Treasury to be doing its own thing. They don't want Treasury to be cooperating with the Fed on aggregate demand management.

So I'll just conclude. I would also say just as an aside, that I think that goes to some answer to your question about why this isn't the same thing as a corporate treasurer. It's because the U.S. Dollar is the reserve currency. It's because you want to establish a risk free benchmark and a corporate treasurer doesn't have to make that kind of decision. So I just conclude, enormously important work, great job in surfacing some of the issues. But I think this element that is run through the paper about Treasury and Fed aggregate demand management, I think it's frankly naïve and dangerous.

MR. WESSEL: Well, naïve or dangerous, which one?

MR. CRANDALL: I'm going to pick up on a lot of the things that have been discussed so far and frankly, like a lot of people in the market, I was quite happy with the essentially isolationist policies that the two agencies adopted during the crisis. I think it worked out pretty well to have you to them pursuing their own objectives. But the paper's persuaded me that there's a probably a better way to do it and it's worth thinking about that in advance now rather than having to improvise when disaster strikes again. I'd like to make three quick points before getting into talking about how I might think about coordinating policies. First and you know, earlier, both Jason and the earlier panel talked about why the reasons that asset purchases are more than hydraulic. I would very very very strongly emphasize the irrational component of that. If people around the world -- the reason why --

MR. WESSEL: The irrational part.

MR. CRANDALL: I'm sorry, irrational, yes. If people were going to write a book about debt managers around the world, I wouldn't call it the alchemists. Debt

managers don't keep -- they aren't the keepers of the secrets of the temple. Central bank operations have a special punch that has a psychological impact that moves commodity prices in Brazil the second they're announced. Treasury debt management actions don't move commodity prices in Brazil the second they're announced. You get more bang for your buck by having the Fed do it, which tells you something important about the division of responsibilities here.

A couple points about Treasury debt management and again, this has been touched on before. We tend to think of the liquidity of government bonds as an intrinsic quality and an inherent natural quality. It's something the debt management offices around the world have been working very hard for decades both to enhance and preserve. If you looked at the slide earlier that showed the decline in the term premium on ten year Treasury notes, part of that comes from more effective or more successful monetary policy over the last couple of decades but part of it comes from an extremely deliberate disciplined approach to debt management that's been built up over the years in the United States and a very important component of that is the regular predictable nature of Treasury issuance, so you want to find, in thinking about ways to coordinate, you want to find ways to preserve the gains that you get from the very disciplined debt management process we've evolved over the decades, not leaving that aside.

A related point to the liquidity issue is investor confidence. This covers a wide spectrum. It's everything from having confidence that your secondary market will work well at the time of stress, to being confident that the debt will be paid off. Now debt managers don't have any control over how much borrowing they have to do, but they can, even when borrowing rises, they can improve market confidence, investor confidence, in the credit worthiness of that debt, by having a consistent discipline debt management process. You want the Treasury to preserve that, and again, that tells you

something about the division of responsibilities here. People don't think that the Fed is undermining the Treasury, for whatever reason, people don't really think the Fed is undermining the Treasury's regular and predictable philosophy when they undertake quantitative easing. You can get more benefits from the irrational market response to quantitative easing without sacrificing the benefits of Treasury discipline. So with those as background, I'd like to talk about ways that I think we can in fact have more coordination between the two agencies going forward. First one is at the short end. The paper touches on this briefly, but I think actually in the next few years, it's going to be a much more important component of potential Fed and Treasury coordination than long term duration management. You know, we could spend the rest of the morning talking about the differences that the liquidity coverage ratio is going to make in the financial system. Essentially the LCR are leap frog reserve requirements and replaces bank reserves with high quality liquid assets as the controlling variable for the financial markets, so the old model in which the Fed had sole control over the supply of reserves as its handle on the short end, is gone. You now have multiple assets, issued by multiple entities, Fed and Treasury, in multiple flavors -- bills, notes, reserve balances, RP's, being held by multiple market participants, both banks for LTR purposes, money funds for investment purposes. That ensuring that there is an adequate supply of short term liabilities is critical. Now that's not going to be a problem as long as the Fed's balance sheet remains as large as it is. The Fed's going to have to transform a lot of its liabilities into something more usable in the form of reverser RP's, but there are enough high quality liquid assets out there. When the Fed's balance sheet starts to shrink, you're going to have an opportunity for the Treasury to take advantage of the (inaudible) opportunity that the authors describe by issuing more short term bills without anyone in the market, anyone in the world, questioning why they're doing it. They're not just trying

to save a few bucks on the side. What they're doing is meeting a demand for HQLA that's been created by --

MR. WESSEL: Excuse -- high quality liquid assets.

MR. CRANDALL: High quality liquid assets. My colleagues at the Treasury tell me it should be pronounced hook-la, but I'm going to stay away from that. So you've got a very obvious -- you know, the LCR only works with the large stock of exogenous liquid assets. Fed and Treasury have to provide that and they're going to have to think about how they coordinate. When the Fed starts shrinking its balance sheet, starts reducing the amount of liabilities it's providing, Treasury is going to have an opportunity to ramp up the supply of floating rate notes and bills.

Then at the long end, I'm very much hoping that as we go forward, that quantitative easing asset purchases get put back into the break the glass category. And when the Fed was doing all of its disaster planning, 10 or 15 years ago, it had a collection of instruments that it clearly set aside as something only to be used in a crisis. I'd like to see Fed asset purchases in the bond market go back to that, which means that you don't need annual consultations. You need the Fed to be in a position to act when things go wrong. There's still a way to preserve for the -- to have better coordination. The Treasury could in advance say that if and when its borrowing needs rise, in response to cyclical needs, fiscal stimulus packages, whatever, something clearly drive by the kind of event that would call for government financial easing, that all net new borrowing, all additional borrowing will be done at the short end until such time as the economy has recovered, establish that as part of Treasury doctrine and you don't look like you're cheating when the time comes. You don't make the market think that you're trying to game the yield curve, which is a real danger you run into.

MR. WESSEL: So in other words, get the same result that the authors

say, but the Treasury does it unilaterally in advance so you don't have this problem that Jason identified that it compromised the independence of the fact.

MR. CRANDALL: It preannounces its policy. It preserves the perception of a disciplined debt management process and gets to the same end.

MR. WESSEL: Okay, so let me ask you guys to defend one thing here. So I get that there are two virtues in this world. One is that the Fed should be independent. And the other is that predictability is supposedly good for the government when it financed this thing. But surely there's something to the authors' point that in this extraordinary period that we've just been through, isn't it, doesn't it seem a little bit crazy that the Fed was rowing as hard as it could in one direction and the Treasury in the same boat is rowing in the other direction, and isn't -- doesn't that suggest we have something less than the optimal institutional arrangement?

MR. CUMMINS: Okay, so it didn't look pretty at times and for people in the room who were in different seats, they can appreciate that first hand and so, from my seat on the TBAC, I can appreciate some of the things you're saying about how, we were talking about extending the maturity and then if you did the chart where you adjusted for what the Fed was doing, it was like we were running to stay put. So I appreciate the description of things. I think that there are different clienteles that you have to think about here. So when it comes to debt management, if you had gone out, so Mary goes out to say, for CIC and says, we have a great new plan, here's what we're going to do because we're in a crisis. We're going to issue lots and lots of short term debt. And we need you to buy all of our short term debt, because that's the way that these authors have told us we're going to get the best bang for the buck. I think you would see among those extraordinarily risk averse investors a real visceral negative response. And so I think some of the things that are going on with this, you know, going back to first principles with

the regular and predictable and maturity structures across the curve, go to the points I was making about, you want to be able to set a risk free benchmark for these clienteles out there and you want to preserve the U.S. Dollar as the reserve currency. And so if you have that as your mandate, I think you have a different set of policies you pursue. If you have the Fed as your mandate, where you're trying to pursue successfully achieving a dual mandate with extraordinary monetary policy, I think you have to move in a different direction, so I think if you just look at it as monetary policy, that we're working across purposes with one another, but if you understand I think a more catholic, with a small C set of requirements for debt management and monetary policy, see that they have to (inaudible).

MR. WESSEL: But don't they have the same ultimate objective -- the well-being of the American economy? You're saying that the Treasury thinks the way to get there is by doing -- to keep the Chinese happy by giving them all these 30 year bonds, but they have -- they're both -- the only reason they're doing it -- none of these things are an end in themselves. They're a means to a better U.S. economy.

MR. CUMMINS: So I take it as parametric that some investors have different incentives and some have different budget constraints and so on so that they end up acting differently from what you would assume in a single rational optimizing actor's model.

MR. WESSEL: Right. And just one more question. You mentioned the U.K. and the interaction between the Bank of England and the Chancellor of the Exchequer. But the U.K. Treasury did not do what the U.S. Treasury did. They did not lengthen the maturity of their debt, I believe. It's in the paper.

MR. CUMMINS: It was already long.

MR. WESSEL: I see.

MR. CUMMINS: It was already long.

MR. WESSEL: So you say they started from a very long position.

MR. CUMMINS: It's already too long in some dimension.

MR. WESSEL: So it wasn't looking at the same set of facts, coming different strategy.

MR. CUMMINS: They really need to lengthen, in other words, the Treasury did, because we had taken things down so low in terms of the WAM.

MR. WESSEL: Lou, I appreciate that you teased out something that's in the paper that we didn't get to in the discussion earlier, which is, apart from all this business of how QE works and whether it's cheaper in the long run for the Treasury to borrow it more at the short end, there are interesting financial stability issues at hand here. And I want to make sure I understand what you said. So the authors make the point that in general, we've been through a period where we know there's a lot of demand for short term high quality liquid paper and we've learned the hard way that if the public sector doesn't create it, there are a whole lot of guys on Wall Street, Summers would call them bozo's, who will create short term liquid assets that aren't really as safe as they think they are and they don't, then we have this whole thing. But I think you were making an interesting point that they don't make in the paper which is, and we're at a point in time where that's going to be an even bigger issue and I want to make sure I understand why. So correct me if I'm wrong. One reason is that we are asking the banks in general, financial institutions in general to hold more short term liquid paper. That's what this liquidity requirement is. So we know that we are by policy, increasing demand for that. And secondly, eventually, the Fed balance sheet will shrink and so there's going to be -- they're going to be doing less and so that gives the opportunity for the Treasury to do more based on all the traditional criteria of debt management without getting into all the

fancy stuff in the paper.

MR. CRANDALL: Absolutely. And the liquidity coverage ratio requires that for a bank to provide a dollar of liquid liabilities to the public, it needs to hold a dollar of exogenous liquid assets, only a couple of sources for those to come from. It becomes a question of determining what the cost of liquidity services to the public is. The more constrained the supply of high quality liquid assets is, the more rationing you get and the higher the cost the banks have to charge to provide liquidating services. So this isn't a broader monetary policy issue. This is a question of economic efficiency and how much you actually want banks to have to charge because of the constraints -- the artificial constraints on the exogenous supply of what is now the new category of reserve assets on the whole shadow banking. So that's actually a much more mechanical argument than the broader issue that I think has a lot of merit, that is, if the government isn't meeting the demand for short term assets, that cash holders are going to drive the creation of private sector instruments. Interesting thought experiment and I don't know what the answer to this is, but if you took away all the Treasury bonds, you have exactly the same problem in long term debt. There is an enormous demand for long term credit instruments and we have no idea how that demand would be met if the Treasury were no longer issuing long term stuff. Some of it could look pretty scary. I'm not -- I don't know what the answer is.

MR. WESSEL: We tried that. Didn't Peter Fisher try that once, cancelling the 30 year?

MR. CRANDALL: Moving right along. There was still a substantial stock.

MR. WESSEL: Right.

MR. CRANDALL: But if you did not have Treasury securities, given the structure of investment demand that we have today, it's just not clear how you would fill that void. Again, it's a thought experiment that I don't think we necessarily need to get into soon, but --

MR. WESSEL: Jason, let me ask you one final question before we go to the break. I remember when we, well, let me skip the preliminaries. So I think what -- it struck me that what you're arguing is frightened me a little bit, which is that the Treasury may have to do things that might not really be what they would like to do because they have to satisfy the demands of their customers, the people who are lending us all this money. So are you suggesting that the Treasury debt management policy is basically catering to the interests of the people who lend the government money, rather than to the interests of the taxpayers?

MR. CUMMINS: I hope you save that question for Mary. I can see John over there scribbling a headline saying you know, Treasury --

MR. WESSEL: It's a yes or no question so --

MR. CUMMINS: Treasury demands more satisfaction for the Chinese. Having already skewered the Fed we can destroy the Treasury today too. I think realistically there has to be some element of that. I think it's just, I don't have as much familiarity because I haven't been in that seat to see. But you know --

MR. WESSEL: So basically when you borrow a lot of money, you're saying you have to, your debt strategy has to reflect the appetites of the people who are lending you money and that's part of the -- that's in the interest of the taxpayers.

MR. CUMMINS: Jay's a banker and he's nodding. That's kind of the (inaudible).

MR. WESSEL: I'm just trying to make sure I understand what's going on

here. Okay. You guys are doing a pretty good job of staying on time. So we're going to take a break now. It's 10:40 I think. We're going to give you -- help me out here, five minutes. Five minutes to run out and get a cup of coffee and come back in, and if you come in late, you will miss the pearls of wisdom from Mary Miller. You'll miss the pearls of wisdom from Jay Powell and Mary.

(Recess)

MR. WESSEL: Okay. So, we want to continue the conversation with a view from the official sector. And we're very lucky to have two people who are particularly well-qualified, by both their -- by their jobs they've held, to discuss the issues that are at the heart of this paper.

We're going to start with Jay Powell, who's a member of the Federal Reserve Board of Governors, and has been since May 2012. He's done a lot of different things in his career, but during the George H.W. Bush administration, he was the Undersecretary of the Treasury for Domestic Finance, under which all these issues arise.

And Jay's going to speak for seven minutes or so, and then we're going to turn to Mary John Miller, who, until two weeks ago, was President Obama's Undersecretary of the Treasury for Domestic Finance.

And Jay does not speak for the Federal Reserve or the Treasury. I hope you speak for yourself, Jay, right? Is that okay?

But I'm really glad that Mary agreed to do this, because, liberated from the Treasury, she can tell us what she really thinks.

MR. POWELL: Thanks, David. It's great to be here today. Given my role at the Fed -- and I did share this with David when he offered me this kind invitation -- I'm really not in a position to comment on Treasury's debt management policy, which does cut the ring down a bit for me.

And then let me also say that these are my views alone, and not those of anybody else on the planet.

I want to begin by complimenting the authors on this paper, which, as I think back to the days when I was at Treasury, I don't remember reading anything that was quite this thoughtful and systematic in going through these difficult issues. So, I think it's a very interesting paper. That said, I'm going to spend the rest of my remarks disguising my enthusiasm, as Jason did.

So, as many in the audience will know, there was a long period in which Treasury's debt management needs really superseded the Fed's independence. And that period came -- began to come to an end with the Fed -- Treasury-Fed Accord of 1951. So, the Fed gradually regained its independence, and, really, since the '70s, at least, there has been little or no coordination between the two institutions on debt management.

So, this part -- this paper argues that the extraordinary response to the global finance crisis brought about this conflict that -- between debt management and monetary policy that should have been resolved through greater collaboration. And the paper then goes on to propose a regimen in which the Treasury and the Fed would cooperate around debt management at all times, and would fully collaborate at the zero lower bound.

So, as a policymaker, I guess it's natural that I would bring a degree of skepticism to a proposal, to make major changes to institutional arrangements that, at least to me, seem to have served the public well. And I'm going to talk about three specific areas where I've got concerns.

First, the literature on financial stability is really still in its infancy. There is no consensus that monetary policy or debt management policy, certainly, should

assume the kinds of roles assigned by the authors. In particular, policymakers are addressing the problem of private money creation through an array of regulatory initiatives already.

Second, in describing the costs of the existing arrangements, the paper estimates that, as you saw, Treasury's post-2008 maturity extension offset, in a purely mechanical sense, about 35 percent of the effect of the Fed's LSAPs.

And I'll make two points about that. First, I want -- as I think Jason did -- I want to challenge the sort of ex-post framing of that issue. Maturity extension merely continued a policy that Treasury had had in effect for so many years before the crisis. In addition, it was consistent with prior Treasury behavior in similar situations.

So, my starting point would be that the FOMC did what it thought was appropriate ex-ante, to return the economy to full employment and stable crisis, taking Treasury decisions about debt management as fully exogenous.

Second, as the authors acknowledge, I think, in the paper, there are good reasons to think that any effect on the term premium must've been much less than the 35-percent figure implies. Part of it is just that there are other channels of signaling channel, and I personally find it impossible to explain the behavior of asset crisis without looking at other channels. The other part of it is just that markets seem to process Federal Reserve/Central Bank communications very differently than markets process Treasury debt management announcements.

In any case, the LSAPs tripled the share of the Federal Reserve's outstanding -- tripled the Federal Reserve's share of outstanding tenure duration from about 12 percent to 36 percent, and had quite significant effects on the prices of financial assets. By most estimates, the 10-year Treasury premium was deeply negative for the first time from mid-2011 through mid-2013, and it remains near zero today, far below

normal pre-crisis levels.

Given the variable level of rates over this period, it's not at all clear to me that a slightly lower term premium would have produced materially different real-economy results, which goes to the question of what the benefits would've been of collaboration.

Third, the authors' proposal seemed to me to be fraught with risk for the Federal Reserve. And here, I'm thinking of the entirety of the proposal. This goes well beyond the thought that there could be a conversation if we ever find ourselves again in September 2008 in a really emergency situation. I believe that the existing arrangements have served the public well. I believe that monetary policy is -- should be independent, and that that independence is highly valuable to society. There's lots of research that supports that point, and I'm afraid that any active collaboration between debt management and monetary policy, even in a crisis, would risk calling into question that independence. And I would look, at a minimum, for significant benefits from even asking a question.

As Jason showed with his picture of Bill Martin, what he said is even more true of the period leading up to the 1951 Accord. Anyone should go back and read the really intense conflict between the Fed, and the White House, and the Treasury leading up to the '51 Accord to understand what can happen when monetary policy and debt management get entangled. It was a period -- the period leading up to that accord was one of severe strains between the Treasury and the Fed, and less than full independence from monetary policy.

So, I'll just wrap up by saying that while current arrangements may be imperfect, history suggests a need for caution before allowing these two policies once again to become entangled.

Thank you.

MS. MILLER: So, thank you so much for the chance to be here today.

I also have to say that these are my views as a private citizen, although someone who has spent a fair amount of time thinking about some of these issues.

So, I have a few fundamental reactions to the paper, but I wanted to say a couple of things first that are sort of fact-setting.

First, as you may appreciate, a major driver of the longer-weighted average maturity came from a reduction in Treasury bill issuance, as our deficits began to recede. If you recall, in 2009, we had a $1.4 trillion deficit. The fiscal year is closing today. I hope that number today is closer to $500 billion. But when we were faced with reducing debt issuance, where we began was in bill issuance and some of the two and three-year notes. But it's important to understand that the majority of borrowing the Treasury does today is still under five years. For example, right now, the Treasury issues $87 billion of two-year notes every quarter, compared to $42 billion of thirty-year bonds.

And I think the introduction this year of floating-rate notes was a response to the drop in Treasury bills, a way for Treasury to issue term debt, but with a short-term adjustable interest rate tied to T-bill rates. And I think that's a very important thing to think about, in terms of achieving a desire to term out the debt; at the same time, providing a short-term liquid asset to the market. So, I found it a little odd that the paper did not even mention floating-rate notes, which were a fairly big initiative during my tenure at the Treasury.

So, fundamentally, I just would like to make two points. First, I didn't find much appreciation in the paper for the value of a steady and predictable issuer that is not trying to time the market or compete with private investors. The Treasury's borrowing requirements are very well telegraphed, and they're built into market expectations. As someone earlier pointed out, the market's reaction to the quarterly borrowing

announcements is typically pretty much a non-event. And I think that that approach and these practices really contribute to a low cost of borrowing and smooth market functioning for Treasury securities.

Finally, I'd say the value of a benchmark yield curve for all other markets is another very good reason for not deviating from this approach.

Second, I found the addition of new nontraditional mandates for debt managers highly problematic. Treasury debt managers live in a world filled with very practical issues, like the debt limit and Hurricane Sandy, that can raise very real issues around market access. The only time that I saw financial stability concerns raised around the Treasury market was during debt limit battles with Congress, where the demand for Treasury bills dropped, and yields rose in the short-term.

So, I disagree with the statement in the paper that the Treasury faces "extremely remote rollover risk." I think only someone with no market experience could say this. You would be fundamentally changing the market's comfort level with Treasury issuance by adding these mandates of managing aggregate demand and financial stability.

In line with that, I question some of the paper's assumptions. And I recognize that the case they're trying to make is in stark terms. But first, the assumption that short-term rates would remain unchanged if Treasury issued all of its debt as three-month Treasury bills. In 2012, that would've meant issuing $650 billion of Treasury bills every week -- an astounding increase in issuance that would be even higher today, given the stock of debt outstanding today. Imagine doing that the week before we had to resolve an increase in the debt limit.

Second, an assumption that duration remains constant throughout a heavy increase in debt issuance. The paper implies that the Treasury debt issue -- that

the Treasury issues debt with a duration target. In fact, duration is simply a function of overall debt issuance.

A third assumption I questioned was whether interest rate volatility wouldn't change dramatically with only Treasury bill issuance. There is a lack of attention here to the stock versus flow aspect of rates. If interest rates rise across the yield curve, it has no impact on the outstanding stock of debt, unless you're rolling over all of your debt in the short term at very high velocity.

Did coordination work in the past? Some of my fellow commenters have already addressed this. But there's a very good paper I had mentioned from the Richmond Fed on the narrative of the 1951 Accord between the Federal Reserve and the Treasury that I recommend for reading. But this paper cites the 1951 Accord as an example of coordination. In fact, I think it was an agreement not to coordinate. Similarly, the example of the 1961 Operation Twist coordination points out that it was undermined by the Treasury's issuance of long-term debt during that very operation.

At the end of the paper, the authors point out that there's no liquidity premium in the short-term market today, so they wouldn't recommend a new approach right now. If I followed the logic of the argument, as the Fed rolls back Q.E. investments and long-term debt, the authors would want the Treasury to be selling long-term debt -- or at least reducing sales of short-term debt now.

My concern with this overall approach of shifting issuance to the short-term or gyrating with monetary policy at all is that you might end up introducing a risk premium into the Treasury market, rather than enjoying a liquidity premium.

But to me, the paper does make a very strong case for communication rather than coordination. And it is a two-way street. I believe the Fed can use the information that the Treasury provides to the market to inform monetary policy, and

execute around that debt management plan. At the same time, the Treasury needs to know how the Fed will exit quantitative easing, because the decisions around reinvestment versus allowing the debt holdings to mature will have very material impact on Treasury borrowing strategy.

Thank you.

MR. WESSEL: Thank you. Let me ask a couple questions; then I'm going to invite the rest of the panel to come up, because it seems to me that would be more fruitful.

Jay, let me ask you a question about -- it seems to me there's a lot made about how dangerous it is for the Fed and Treasury to coordinate. So, let's say that they don't coordinate. Isn't it the case that Q.E. would've been more effective if the Treasury hadn't been, for whatever reasons, lengthening the average duration of the debt?

MR. POWELL: Well, again, there are -- so there are two important points to make. One is that any effect on the term premium must've been pretty small, in my view, because they do -- because financial markets do process, you know, Fed announcements and Fed purchases in a very different way than the markets seem to have processed Treasury's policies. That's one.

And -- sorry -- the second point is that the framework is just wrong. Really, the question -- the right question to ask is, did the Fed do what it thought was appropriate, and it -- you know, to achieve the dual mandate, and leave Treasury debt management as exogenous? Or did it somehow feel constrained by that? That would be an interesting paper that someone might write, but that is not this paper.

MR. WESSEL: Right. But see -- so Jason suggested that there was an unlimited amount of Q.E. that the Fed could do, and so the Fed could always do enough to offset whatever the Treasury debt managers were doing. I suppose that that's also an

unproven hypothesis. We don't really know whether there was a limit, right? Just on the -- you don't think that the effectiveness of Q.E. was diluted by what the Treasury did, right? It wasn't small.

MR. POWELL: Well, so, you know -- I mean, I think they do the arithmetic, you know. First of all, these risk premia are time-varying and not well-understood -- and that includes the term premium. But if you just -- if you make the strong assumption that this is all about the duration-removal channel, then you get 35 percent.

The problem with that is that some huge portion of the real effect is probably due to other channels. In addition, there's the second point that I've already made, which is that, you know, by their own numbers, it's about ½ as effective. So, it's somewhere between ¼ and ½ as effective. So, might there have been some diminution of the effect on the term premium? Yes, there might've. Would it have been material? I don't see it. I don't see the case is made here.

MR. WESSEL: Mary, can I -- or do you want to --

MS. MILLER: Let me just add something to that, because I didn't have a chance in my comments to say this. But I did think it was a useful construct to think about the consolidated balance sheet of the government. I wouldn't argue with that.

But I also noted that the duration of that consolidated balance sheet actually went down in the paper over this period, and I think it's because of the reserves held at the Federal Reserve for the banking sector. But that in itself is sort of interesting -- that there was not an in total extension of duration on a consolidated basis.

MR. WESSEL: So, can you give us a little insight into what you were thinking when you were at the Treasury? You see the Fed doing all this Q.E. We're in an extraordinary period of history. We don't want to lock ourselves into the way we did

things before just because we did them before. did you ever contemplate altering your preexisting strategy of lengthening the average duration?

MS. MILLER: Well, we certainly looked at debt structure all the time. And to get at something that was said earlier, I think the Treasury is constantly facing the markets, and testing demand, and trying to figure out, you know, the best structure of our debt. And we look at options very carefully, to see what sort of coverage we're getting, and where people are investing.

But I don't think we, at any time, contemplated moving away from the broad message, the sort of longer-term message of extending the average maturity of the debt. And it's something we talked about a great deal, with the Treasury Borrowing Advisory Committee. But that just seemed like the prudent course in the moment that we were in. And don't forget -- I think that in my tenure, there were five debt limit discussions, shall I say. And keeping the markets calm, focused, and not, you know, disturbing the universe with shifts in strategy or introducing new mandates seemed like a fairly prudent way to operate.

MR. WESSEL: So -- but how much of this is just the debt limit thing, which (inaudible) we would not get a vote in this room to continue this debt (inaudible) I suspect, right?

MS. MILLER: I -- well, I --

MR. WESSEL: Is that just a symptom of something bigger, or is -- are you saying that -- if we didn't have the debt limit -- if the Congress did away with it -- would you take a different position?

MS. MILLER: Well, if you're going through a very deep economic contraction, and your borrowing jumps in the degree that the Treasury borrowing jumps, as a debt manager, you're looking for the steadiest way to execute at the lowest cost.

And one, I think, important feature of that is to communicate well with the market, and to not make sudden shifts in strategy -- and to keep the message pretty, you know, predictable.

So, the -- and this isn't something that this era made up; this is true for decades. So, that seemed to be the best way to achieve the Treasury's goals of debt management.

MR. WESSEL: I'll ask you both the same institutional question, and then we'll bring the rest of the panel up. So, in the real world, it's not like the Treasury and the Fed never talked to each other. So, when you were at the Treasury, and you were doing debt management, surely there was what Mary referred to as communication with the Fed about what you were doing (inaudible) exchange of views or not?

MR. POWELL: There was the weekly lunch, which, I believe, is part of the '51 Accord or is a consequence of it. But we didn't have these kinds of issues, so I don't remember any -- it would've been Don Kohn that I was talking to, and I don't remember discussing debt management with him at all.

MR. WESSEL: Mary, how about during this period? Surely you communicated with the Fed about your debt (inaudible).

MS. MILLER: We absolutely communicated. First of all, the Federal Reserve is our fiscal agent.

MR. WESSEL: Right.

MS. MILLER: They run our auctions, and so we have a regular conversation with them. In terms of understanding each others' policies, there's a lot of communication. And I think it's going to be even more important as we proceed through rolling back quantitative easing. There are lots of ways -- what -- the decisions the Federal Reserve will make will impact the borrowing structure of the Treasury.

If the Federal Reserve holds short-term debt that is about to mature, they can roll that over. That will go into the nonmarketable side of our debt raising. If they choose to allow it to mature, that will go back in the public auction. So, that's a rather important thing to understand.

MR. WESSEL: I don't want to put words in your mouth, but it seemed to me, at the end of your remarks, you were suggesting that there was a little less than optimal amount of communication from the Fed to the debt managers.

MS. MILLER: Well, I didn't -- certainly didn't mean to imply that. I said the paper, I thought, was interesting, in terms of thinking about things from a consolidated standpoint, but, also, thinking about communication. Coordination is a bridge too far --

MR. WESSEL: Right.

MS. MILLER: -- as you probably took from my remarks. I think that would invite a lot of dysfunction. But I do think strong communication will be -- is key. And I think there has been good communication in this post-'51 era. And I would certainly want to continue that.

MR. WESSEL: What would be -- do you think it would be dangerous for the Treasury and the Fed to do what the authors say -- is to, at the beginning of the year, say, "Look, here's how we're thinking of the world. The Treasury continues -- is planning to continue to do X, Y, Z, and the Fed will take that into account when it manages its balance sheet"? Do you think that would be like some --

MS. MILLER: I think that would be difficult. I think that the market would then be watching for each FOMC meeting to see whether there'd be a change in debt management strategy. I think that agreeing on something in the beginning of the year that would hold for a full year would be hard. I don't even know if you would find consensus among the Fed members and, you know, Treasury debt managers to do that.

I think it would be introducing a new task that would be pretty hard.

MR. WESSEL: What do you think, Jay?

MR. POWELL: I -- first, I want to echo what someone said earlier. I think it was Lou -- that, for the Fed to operate in the long end is truly the exceptional case -- and, hopefully, something we won't see again for a long time.

I also think it's very fair and a near certainty that the Fed will -- it's fair to ask and a near certainty that the Fed will be very transparent about reinvestment policy, so that, long before it becomes a Treasury issuance issue, the path will be well-lit in terms of how we'll allow securities (inaudible).

MR. WESSEL: Let me at this point ask Sam Hanson and Larry Summers to come up and sit down here, and Lou and Jason to come sit down here, and we can broaden this conversation.

I'm going to turn to Larry in a minute, but Jason said he wanted to answer my last question about the -- was it dangerous to have a joint statement?

MR. CUMMINS: So, I just wanted to emphasize something which maybe has gotten (inaudible) -- I just want to emphasize something that may have gotten lost in this, which is, what is the law? The Fed is responsible to the people through Congress and the way Congress has set the law. The dual mandate doesn't come out of a textbook; it comes out of the product of governance. And the Fed is responsible to Congress, as embodied in the Humphrey-Hawkins Act and later extended, in order to manage monetary policy.

So, what you're proposing -- I mean, I'm not saying it necessarily is literally against the law, but it certainly runs against the spirit of Congressional lawmaking and oversight for what the Fed's supposed to do. So, I think it would be an exaggeration to say it's against the law, but I think it is running counter to what Congress has set up as

the role for the Central Bank in the United States.

MR. WESSEL: Larry?

MR. SUMMERS: First of all, I've seen a lot of campaign speeches for office. I have rarely seen as effective a campaign speech for the job of Governor of (inaudible) as Jason's remarks on (inaudible) Central Bank independence. And I just want to compliment him for that. That was really splendid.

Obviously, I yield to nobody in my enthusiasm for the notion of Central Bank independence. The paper I wrote with Alberto Alesina about 25 years ago is a kind of uber-text of the case that Central Bank independence means lower inflation, and it doesn't mean any other deterioration in economic (inaudible).

I find the suggestion that the kind of coordination for revision threatens Central Bank independence to be at the edge of absurdity. Start with this: The basic idea about Central Bank independence is that the politicians will do the irresponsible stuff, and so you have to take it away from the politicians by making the Fed independent.

Notice what the dynamic is here. Who's issuing all the cash, and who's absorbing it? The Fed's issuing all the cash, and the Treasury is absorbing it. It is the Fed that is on the more dynamically inconsistent policies, and it is the Tressury that is in exactly the opposite direction. The reason we have independence is to stop the Treasury from getting the idea of making all the debt short, and driving down the short rate, and living for the moment, and doing all of that thing.

The actions that we're trying to protect against the short-term temptation on are the ones that the Fed is doing, and that the Treasury is undoing. And so, to that extent, all the traditional theory about Central Bank independence does not go to this particular issue, and what we've seen this time, first of all.

Second point: Lou had put a lot of emphasis on regular and predictable. I'm for regular and predictable, too. But what do we mean by regular and predictable? What we mean is that the range of market participants out there find what's going on from the government, in terms of buying and selling bonds, to be regular and predictable. Why -- how anyone could think that it maximizes regular and predictable for the Treasury to give a lot of speeches about regular and predictable and talk about the debt in issues, and then for the Fed to do irregular and unpredictable purchases -- how that maximizes regular and predictable to the market is a complete mystery to me.

Now at the risk of being slightly cynical here, I would observe -- if I were a market participant who kind of traded around back and forth with bonds, I might think it was a pretty good arrangement for the Treasury to be issuing, and the Fed to be buying them, and them both to be going to me as a broker and a dealer.

So, if you wanted to create a lot of activity and action from which market participants would benefit, running two uncoordinated operations -- some of which were selling debt, and some of which were buying debt -- would be a good one, and no corporation would ever have two treasuries that had uncoordinated policies and different objectives, both of whom pretended to speak for the CEO.

So, the idea that regular and predictable is a doctrine that should apply to the federal -- to the market participants out there in the public -- similarly, any rational planning with respect to the desirable debt structure or all of that is not the debt structure, some of which is held by the Fed -- which is a quasi-captive. Any company that was thinking about its corporate treasury and thinking about its debt structure would net out the debt that was going to be held by its wholly-owned subsidiary. That's what the Fed is -- because all of its profits are rebated back to the Treasury.

So, rational planning is rational planning with respect to the debt that is

going to be held by the public, which is the net quantity.

Next point: There is this idea that there's some -- that it's like the Bill of Rights or something, that, like, the Fed's independent, and the Treasury sets its debt policy. Well, you know, I'm not without some policy experience, either. We would not have dreamt of issuing the index bond without the enthusiastic support and cooperation with the Fed. That was a coordinated venture. Yes, it was debt management policy, and it was a coordinated venture. And I don't think Alan Greenspan or Don Kohn felt that somehow their independence was put at risk by their active cooperation and discussion of the index bond.

By the way, we did it. They did it. We gave all kinds of virtues about it. We talked about capital market development of real securities. We talked about how it would provide a useful indicator. Nobody said, "It's something other than regular, and predictable, and cheap, and, therefore, it's outside our mandate, and threatens life as we know it." I was there in --

MR. WESSEL: Actually, somebody probably did, actually.

MR. SUMMERS: I was there in 1993. The Obama -- the Clinton administration, with extensive discussion with the Federal Reserve, embarked on a program of shortening the debt -- embarked on a program of shortening the debt because they thought it would be cheaper, embarked on a program of shortening the debt because they thought it would have the effect of bringing down long-term interest rates, which would crowd in investment, which would make the economy grow faster.

Folks, the earth is still spinning. Economic performance was pretty good afterwards. The Constitution didn't shake, and there was cooperation.

And so there's a legitimate question as to whether we proposed exactly the right institutional arrangements. I'm totally open to argument about that. What's the

right amount for the Treasury to do, and what's the right amount for the Fed to do? You can argue different things.

By the way, every single international economics textbook teaches how monetary policy and exchange rate policy are deeply and profoundly intertwined. Treasury has responsibility for exchange rate policy; the Federal Reserve -- has the lead responsibility for exchange rate policy. The Federal Reserve has lead -- has policy for monetary policy. They have dialogue with each other. It's regarded as being of great importance that, short of a major catastrophe, the Secretary of the Treasury and the Chairman of the Fed work themselves onto the same wavelength. Financial stability is regarded as being of profound importance, and liquidity provision is central to it.

And the central institution in the United States government for dealing with it is the FSOC, on which the Secretary of the Treasury sits as Chair, and the Chairman of the Fed sits as a member. And life is still going on. Breakeven inflation is lower than it used to be.

So, I find the notion that we -- that the United States government -- should confront markets with two huge actors, both of whom are making announcements about future policy, both of whom are giving theories that describe their actions, in terms of what is good for the country, that are entirely disconnected, where the Treasury never makes mention of the fact that this might have any impact on the economy, and the Federal Reserve never makes mention of the fact that this might have any impact on rollover risk -- and the idea that this is the best way for the United States to present itself to the markets -- it seems to me to be at the edge of absurd.

Now then there's the question -- and I'll finish on this -- what's the right posture with respect to more short-term debt versus long-term debt? Just to be crystal-clear, I am -- nothing in this paper says that we should try to game the market and, you

know, guess when the term premium's low and high, and manipulate that way. That would be a mistake.

The question is, in terms of the broad posture, what is the right posturing versus short and long-term debt? I can't imagine why -- and, by the way, countless, Mary, Treasury statements have referenced various aspects of capital market development -- if that's okay to talk about, why it wouldn't be okay to talk about providing more short-term securities so that there was a safe liquid form in which people could hold it, so you didn't have temporally-mismatched duration -- why that would somewhat threaten life as we know it, I, again, just cannot begin to understand.

So, I think what -- the paper makes a reasonable case that the only -- the principle major consideration is educed in favor of lengthening duration is a bunch of stuff about the stability of federal funding requirements. And we showed you a pretty tumultuous 50 years. Basically, there was no change. If you had gone much further than the paper ever recommended, to all shorts, in anything about the volatility of Treasury funding requirements -- and that there were a variety of other considerations that pointed in a different direction, towards the desirability of shorter funding -- so I guess we're one country, and I think we should have one debt management policy, not two.

MR. WESSEL: Everybody agree?

MR. CUMMINS: Can I do one quick thing?

So, in my -- let's call it -- 25 years as a professional economist and practitioner, Larry's given me two compliments. The first one was a few years ago, where I think he said that an argument of mine was not completely without merit.

And the one today is in the same vein that the argument that I and a number of other people made is on the edge of absurd. So, I'm going to take that in the positive spirit in which it was meant from Larry, and, with a quick reply, just point out the

following.

It's a standard debating tactic to take an exaggeration, and push the argument to the extreme, in order to make the other side seem absurd. I draw your attention back to a better debating tactic, which is my picture. My picture is Martin. And you need to develop a theory of the case about why that wouldn't happen again.

And, so far as I can tell through the verbiage, Larry's theory of the case is, this time is different. And we just don't know whether that's true.

MR. WESSEL: Sam, let me --

MR. SUMMERS: I'm sorry -- just one more time.

Look, I get the Martin thing. I really get why that was bad. What I'm trying to get is, if the Treasury had thought about the fact that we were in a huge crisis, that it was the policy of the United States to shorten the debt in order to reduce a variety of risk premia, and that that was the decision that the independent Fed had done to create a lot of liquidity -- the independent Fed had decided that we needed to create a lot of liquidity to combat deflation -- if the Treasury had decided not to pursue a policy of undoing that, can you tell me how that would've, like, threatened inflation -- how that would've threatened the values that Bill McChesney Martin stood for? Like, just explain it to me -- how it could've threatened those values.

I mean, I just can't get -- I mean, what I'm asking for in this particular case is for the Treasury to go follow the Fed. So, I don't -- I just can't get myself around how this has anything to do with the McChesney Martin example.

MR. WESSEL: Jay?

MR. POWELL: Oh, look, let's put aside what happened in '08/'09. I mean, I just strongly disagree. But put aside what happened in '08/'09; think about going forward. So, the idea is, we're going to walk into a room with the Treasury every year,

and we're going to internalize each others' objectives.

Now how is it that we do that, other than by -- you know, and where does that lead over a period of years? You know, the thought of that we're always going to be reasonable, you know, well-meaning people -- what will happen --

MR. SUMMERS: Kind of like we do on foreign exchange.

MR. POWELL: What will happen when the Fed and the Treasury -- when a Treasury Department strongly disagrees with what the Fed is doing? That negotiation -- and what will happen to expectations in the marketplace, for example, about the debt ceiling when there is such cooperation?

I just think it's -- look, it's -- you're right; there's conundrum at the heart of this. I think you have to come up with -- it's -- you got to do more than just point out that it's a conundrum; you've got to come up with a set of institutional arrangements that don't have any prospect of leading back to Martin or to the '51 arrangement.

MR. SUMMERS: So, in normal times, I agree with you. And I think everybody agrees that the Fed's not going to be in the long end. So, in normal times, what's going to be discussed is, the Federal Reserve knows a lot about financial markets. The Federal Reserve is going to have views about what the optimal structure of capital markets is; how having more short-term instruments or fewer short-term instruments is helpful.

In normal times, when the Fed is not operating, basically, it's going to be the Fed having a larger role in advising the Treasury, like the role that -- certainly when I was in the Treasury, we chose to give the Fed because we thought they knew a lot on questions like index bonds.

So, I don't get how a larger role for the Fed with respect to that can possibly be threatening to some fundamental aspect of the autonomy of the Fed. I mean,

just repeat, one more time, it was the Fed that was doing the big expansionary thing, and the Treasury --

MR. WESSEL: Right, but the point they're making is that in this instance, it was going -- the arrow was going that way. And they're raising the question, once you set up this institutional arrangement, what about when the arrow goes the other way? Haven't you set -- you opened yourself up. That's --

MR. SUMMERS: Nobody -- there's no suggestion -- nothing in any sentence I've uttered or that's in the paper could be interpreted as giving any license for the Treasury to instruct the Fed to do quantitative easing. The only question is -- the Federal Reserve's going to do that type of policy to the extent it wants; the question is whether there's going to be some integrated framework that's going to look at what happens overall, or whether we're going to have the push me/pull you.

MR. WESSEL: Mary?

MS. MILLER: So, I guess, you know, the question I keep thinking about while you're talking is, what would the costs be if the Treasury moved away from the strategy that it's pursued? If the Treasury is viewed as working with the Fed, would there be additional costs, in terms of, right now, we have this very low cost of borrowing regular and predictable. But if we moved away from that, and then the market had to somehow guess how we would be moving, would there be additional costs? And how would you look at that?

MR. SUMMERS: So, first of all, I don't -- I mean, I think we do pretty well. I think we mostly do pretty well because we're the United States. But I don't see how anybody who really values regular and predictable could think that the Federal Reserve doing Q.E. 1, and stopping it in Q.E. 2, and everybody's speculating about taper tantrums -- I don't see how anybody could think that there was anything especially

regular and predictable about the flow of Treasury securities that the market participants had to hold. So, anyone who thinks that they -- that, in an economically meaningful sense, regular and predictable has been achieved over the last four years is wrong.

Now I think that since the world -- since a lot of the function of these policies is to lean against the wind, and the wind has been pretty unpredictable, it's okay that our policies haven't been regular and predictable, because they've counteracted an uncertain world. But I think it's a complete fiction to say that because the Treasury has issued in some predictable way, and the Fed has repurchased in some entirely unpredictable way, that anything regular and predictable has gone on.

So, I would think that if there was at least a little bit more coherence in, like, what the two sides were saying -- if there was full communication about the Treasury's -- the Fed's intentions with respect to its balance sheet, and Treasury's issuance, and the kinds of issues that Lou talked about, then I think it would actually be easier to understand what was going on for market participants --

MR. WESSEL: Mary, you don't see it, though.

MR. SUMMERS: -- and so I think the benefits of regular and predictable would get to be greater.

MS. MILLER: Well, I think it's sort of important to understand that the Federal Reserve cannot buy securities directly in primary auctions. We have to go out and face the market, and we have to entice investors to buy our debt. The Federal Reserve has been buying securities out of the secondary market, but I think in the first instance, we need to be sending clear signals to the market about how much we're going to borrow, or what tenors, and all of that.

I think what the Fed has done is completely on top of that. I think we have said -- you know, we're in the background; we're just sort of part of the wallpaper,

and we're doing our financing as we told the market we're going to do, as is built into market expectations. What the Federal Reserve does is new information to the market that can move things and can affect things. But I don't see the two as completely seamless; I think they're quite different.

MR. SUMMERS: Let's go back to the corporate example. If I was running a corporation, and the corporation had two parts, and, like, one part was issuing a lot of debt, having a really predictable issuance of debt, and then another part of my corporation was, like, buying up that debt on the secondary market, I think I'd have the idea that this was a little silly, and that it would be better for us to coordinate, and not give all the spreads to the people when we sold, and then when we bought. I think I would just decide that that was rationalizing our debt structure.

MR. WESSEL: Let me let Lou get into this.

MR. CRANDALL: You said at the outset that it's a mystery why it could be seen as regular and predictable to have the Treasury do what it did, and have the Fed do what it did, and you're right; it's a mystery. But it's one of the mysteries of life. No, it really is. It's absolutely true.

And there's a reason for that. And the reason is that the market looked at quantitative easing and said, "This, too, shall pass" -- that the entity that drives debt management policy in the long run was adhering to its core principles, and there was a real advantage to having the Fed be the one breaking all the rules, breaking the glass when an emergency came.

I agree with your fundamental premise, that there's a better way to do it. I don't think that an ad hoc approach to debt management policy in the midst of a crisis would have been the right answer. I think establishing a different philosophy now for how we will address this issue in the future is actually the right answer. The -- you -- it's all

right. You know, the Fed manipulates markets; the Treasury does not. And the fact that the -- except for foreign exchange policy.

And I would say that my perception of Fed/Treasury coordination over foreign exchange policy over the years is a little less tranquil than, you know, it's -- but there have clearly been episodes where there were important decisions to be made on foreign exchange policy, and you could come together on an ad hoc way there without really tearing down the barriers between the two.

MR. CUMMINS: Can I just say one thing about this corporate treasurers example?

MR. CRANDALL: Yeah.

MR. CUMMS: So, I think the -- it sounds really seductive when you hear it out of Larry's mouth, but I just want you to parse a couple things about it.

Just because the Fed had to do Q.E. 1, Q.E. 2, Twist 1, Twist 2, Q.E. 3, and maybe the communication wasn't totally smooth, and maybe they had a lot to grapple with, that issue can be highlighted with regard to the issue that's central in the paper, which is Fed/Treasury aggregate demand management, which is -- if you're using the corporate treasurers example would be akin to the question of whether one part of some company should be merged with another part of another company.

So, yes, they did all kinds of crazy things at that Fed/Treasury, and they maybe could've done some things better in retrospect. But the issue here that we're talking about is whether we should marry these two treasuries -- which one may be Exxon, and one may be Kellogg's Cereal. And so they're completely different entities, in, I think, the way that some of the people on the panel are thinking about.

MR. WESSEL: Can I -- Sam, can I ask you to respond? Yeah, I know you were trying to get a word in, but, also, Mary made a suggestion that (inaudible) the

average maturity of the consolidated debt actually --

MS. MILLER: Duration.

MR. WESSEL: -- duration --

MS. MILLER: Went down.

MR. WESSEL: -- went down because there was so much --

MS. MILLER: (inaudible) paper.

MR. WESSEL: -- reserves at the -- so doesn't that -- how does that play into this whole analysis with the Treasury offsetting the Fed?

MR. HANSON: No, I mean, so the fact that it actually does go down again comes back to the fact that whatever the Treasury did partially -- it's -- you know, it -- that's -- it partially offsets. So, the fact that it actually does still go down is, you know -- the consolidated government was shortening the maturity of its liabilities.

MR. WESSEL: Did you want to make another point before -- Sam?

MR. HANSON: I was going to -- I mean, on the -- I guess -- yeah, I'm pretty much with Larry on the, you know, corporation with two treasuries, in terms of its -- yeah, I just don't understand, you know, if we say there's a low-risk premium because we're predictable; there's not a lot of supply risk. It feels like the way that the market -- you know, the way that the market experiences supply risk is sort of on a consolidated basis. So, I just don't kind of see how we can have both at the same time.

MR. WESSEL: Larry, before I turn to questions, would you -- did I --

MR. SUMMERS: Yeah, I think probably most of the issues are clear, at least these points. The Treasury has, on occasion, as it did in 2000, been involved in repurchasing debt. Everybody seems to think that was okay. They repurchased debt because they wanted to influence the maturity structure for various reasons, and that was part of debt management.

The -- on the question of aggregate demand, the paper's very clear that when you're not at the zero lower bound, aggregate demand's up to the Fed, and the Fed can completely control it, whatever else happens, by influencing the short-term interest rate. So, the discussion about aggregate demand is largely relevant when the interest rate is at zero. And when the interest rate is at zero, there's probably a lot to be said for using all the instruments you can to spur aggregate demand.

Third, nothing in the paper says -- by the way, nothing in the paper says that the Treasury should go do things nearly as ad hoc as (inaudible). The only question was whether the general orientation of policy should be at cross-purposes with what the monetary authority is doing. And there, it seems to me the -- why would you want Treasury policy to be actively at cross-purposes?

MR. WESSEL: So, we have some mics, I hope -- somewhere. And raise your hand, and tell us who you are.

Going to start with Peter Hooper over here.

MR. HOOPER: Yeah, Larry, you make a good point. There's obviously -
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MR. WESSEL: (inaudible) identify yourself.

MR. HOOPER: Peter Hooper, Deutsche Bank.

You make a good point -- obviously, many reasons why, in this particular instance, this -- we could've done better. But there's a matter of perceptions here. You noted earlier that we had this tremendous increase in debt over the last five years. At the time, we had a tremendous expansion of the Central Bank balance sheet, but with different country labels, different times, and would've expected a pretty sizable increase in long-term inflation expectations under those circumstances, I think.

We didn't get any movement in long-term inflation expectations in the

U.S. -- perhaps partly, it was macro-situation. But it was also, I think, because of this really well-ingrained sense of the Fed as an independent institution. Now there's perceptions.

Maybe in this instance, it is sensible to be -- think about having done things differently, but when you start talking about consolidated balance sheets -- there's a reason why debt held by the public in the U.S. includes Federal Reserve-held debt. It's outside the government, and that perception, I think, is central to this long-fought-for independence, which, I think, is one key factor holding inflation expectations under control.

Yes, you make this move now. I think it's been pointed out effectively, down the road is a slippery slope and some real risk there.

MR. SUMMERS: We need to understand that what we've just been through is a set of efforts that cost -- set of events that cost 60 or 70 percent of U.S. GDP. So, you kind of -- this is one little episode in a long battle against inflation.

In terms of the welfare of American citizens, this was one lasting trauma of immense proportions. And so the ability to deal with aggregate demand better during this is not a minor item relative to the central value of inflation. That's the first point.

Second point is, I don't believe for a moment that the Fed's independence was compromised one whit by the kind of cooperation we had on the index bond. I don't believe the Fed's independence was compromised one whit by its participation in the Plaza agreement, which went to the exchange rate, which was more centrally tied up in monetary policy than anything that we're talking about here.

And I think that -- I think all of you who are Central Bank independence freaks need to get yourself around a very odd feature of the current political dynamic, which I don't really understand, either -- which is, the whole idea behind the Central Bank

independence is that the people, and the politicians, and all the barbarians out there always want -- always are tempted to inflate, and print money, and issue short-term debt -- do all this bad stuff. And so you need a bulwark of non-democracy, like the judiciary, that's separate to protect against inflation. That's the whole idea.

But look at all the political debate in the United States right now. The -- all of the attack on the Fed -- or 85 percent of the attack on the Fed -- is from the hawk side, not from the dove side. It's from people who are concerned that the Fed's off being irresponsible, and if we just could give Rick Perry his way, then we could get back to responsibility.

So, we need to understand that the dynamics that surrounded that coming out of the 1970s -- we're not in the same place. And, by the way, if it -- maybe you should go out, and, you know, bet that we're going to have higher inflation. But let me let you in on a secret: There's a lunch that takes place between very senior officials of the Treasury and very senior officials of the Fed every week. You know what it's called? It's called the debt management lunch. Now that is not, in fact, what it's -- at least, that was what it was called through the '90s, through the entirety of the 1990s. And, somehow, the independence of the Fed survived all that.

And so I just think we need to have some rule of -- we need to have some rule of reason --

MR. WESSEL: Mary, your question of fact?

MS. MILLER: I think a lunch takes place every three weeks. It's called the Fed/Treasury lunch today. I just wanted to --

MR. WESSEL: Don Kohn?

MR. KOHN: Don Kohn, Brookings.

So, I think the problem I have with the corporate metaphor is one that

Jason raised. And it's about accountability and governance. And a corporation has really one goal: maximizing profits over time. The government has a bunch of goals, and the Congress, in effect, has assigned different entities to those goals, and holds them accountable in different ways.

So, I think part of the resistance you're getting to the joint-ness of your proposal and the corporation is -- analogy is, it interferes with that, and it -- there's risk that, when we break that separation of goals and accountability down, things could happen that you don't -- that might not -- reasonable people might not do, but might happen in other times.

I certainly -- you're right; there was a lot of collaboration on a lot of things between the Fed and the Treasury over time. And maybe -- I haven't been there for four years, and maybe there is less now, but I kind of doubt it. Certainly, the New York Fed is very important in consulting on debt management and board, also, in various guises. But I do -- the joint-ness of the report, I think, crosses a little bit of a line that worries me on this governance and accountability thing.

One more issue here is the financial stability issue. Who gets to decide that? And you've raised, Larry, a point that had occurred to me when I was reading it. You assigned that to the Fed, but there is an FSOC. The Fed, which I've spoken critically of on occasion, has been a government structure, but it's still there.

MR. WESSEL: FSOC, that is.

MR. KOHN: FSOC, right. And the Fed itself seems to have downplayed or even rejected the idea that it would be in a permanent position of issuing a lot of short-term securities -- so that in order to enhance financial stability -- so it'd be interesting to hear your reflections on where the accountability and governance of the financial stability side should be.

MR. WESSEL: Sam, do you have views on that?

MR. HANSON: I mean, I guess we kind of approach where we should locate that more from an operational perspective, and just thinking that, to the extent that there are kind of shifts in the supply and demand for, you know, very short-term money, like paper. I mean, there's -- it's kind of just, like, elastically supplying bank notes. So, there's a sense in which it's very much the traditional province of classical central banking. And, you know, we've typically thought of that as being motivated by financial stability.

So, the way that I'm thinking of it is almost exactly the way that, you know, at least, the original Federal Reserve Act is written. But, yeah, in terms of modern governance and how you square that with the FSOC -- so, yeah, I thought of it almost just more kind of an operational, compared to --

MR. WESSEL: And, Lou, you thought the Treasury ought to do this, independent.

MR. CRANDALL: Well, touching on one of the points of the paper, the -- you know, there is -- it is the case that the Treasury has a financial advantage in issuing short-term debt. I'm cautious about using that too flexibly, but taking advantage of this opportunity to have a one-time increase in the proportion of the liability portfolio that's at the very short end, I think, is a real opportunity.

I would just remind people of what Mary said, which is, the latest innovation in debt management has been the introduction of floating-rate notes, which are going to exactly that need.

MR. WESSEL: Larry, do you have a view on the accountability point that (inaudible)?

MR. SUMMERS: Let me distinguish what I feel very strongly about from

what I don't feel strongly about. I feel strongly, for reasons I've rehearsed ad nauseam, that the kind of sense of complete disconnection is not rational.

If it is -- if having anything that's called a joint report between the Treasury and Fed is seen as dangerously inimical to the appearance of the Fed's virtue, then that may be the wrong institutional form. And it may be that the right institutional form is that there's a periodic conclave, after which the Treasury describes its understanding of Federal Reserve debt management policy. And in light of Federal Reserve debt management policy and the economic imperatives of the moment, launches on its economic policy. The precise modalities around the cooperation are not what I care about; there being a sense that they're not too entirely disconnected operations that's presented to the market is what I care about. So, I can go with Don on that.

And on the financial accountability -- again, I just want it to be something that is thought about, the same way that we take great account of "developing the capital markets," when we think about different questions of debt structure. How providing a liability structure that is conducive to financial stability, not in a cyclical or episodic sense, but in terms of a structure that's conducive to financial stability -- I just want that to be part of somebody's mandate as they think about some of this, which isn't the case right now.

And, frankly, if the Treasury takes the views that Mary takes, which is that that would somehow be profoundly offensive and inappropriate for the Treasury to bring in, then I guess it's more important that the Fed be involved in the process -- because I think the Fed would have a more sensible view than that one.

MR. WESSEL: Mary, do you want to respond?

MS. MILLER: Well, these are closing, like, comments here?

MR. WESSEL: No.

MS. MILLER: Oh, okay.

MR. WESSEL: You can -- but you should take the mic, because you never know when it'll come back.

MS. MILLER: Well, when I think back about my time at the Treasury, and trying to manage through a rather tumultuous period -- I do think the debt managers were always thinking about the national interest, and always thinking about the taxpayers. I would hope that history will look rather kindly on financing this enormous hump of debt at very low interest rates. And I think constantly sort of weighing federal market demand and the right structure of debt was always, you know, at the heart of everything that we did.

We were certainly not ignoring what the Federal Reserve was doing, but I think had we been sort of twisting and turning with Fed policy -- which changed rather significantly over five years, from what they were buying, and different phases or flavors of quantitative easing -- I think that I, you know -- I don't apologize. I think it would've been very confusing to markets had we tried to adapt and to adjust around that.

MR. WESSEL: Glenn Hutchins?

MR. HUTCHINS: David called on me. The -- Glenn Hutchins, Silver Lake.

The -- I just wanted to say, as a parenthetical here, this is precisely -- this is actually way beyond what we imagined we'd be doing when we started this up, David. I just want to compliment everybody on the panel.

The one thing that we expected was that Larry would take about 50 percent of the airtime, which is where -- right on plan, but, also, that we would find it very interesting and provocative. So, thank you.

The -- I can't help but listen to this conversation extruded through a perspective of what in this town is known as a market participant -- which, in New York, we call an investor. And the -- and so I'm going to get away from this coordination piece, which I largely come out where Larry is. I think it shouldn't be too hard for people to get in a room, talk, figure out what each other's going to do, and then have policies that take aware of each other's plans.

But the central notion of this piece, that the Fed somehow -- the Treasury somehow mitigated what the Fed was doing is precisely the opposite of the way we saw it in the markets, which is, we kind of knew that the government was running big deficits; that was kind of understood. And we also kind of knew the Treasury was, like a lot of corporate treasurers, lengthening duration to take advantage on historically long-term interest rates.

And we saw quantitative easing as mitigating that, right -- as, on the margin, bringing rates down, and, on the margin, driving risk capital to things other than fixed-income securities to try to generate economic growth.

So, I think the sort of -- as a market participant, we sort of -- the causality or the -- in that (inaudible) seems sort of backwards.

Also, the assertion -- I'm not sure if, Larry, you meant to say this -- the assertion that -- the conclusion that -- I think that Mary's insight about the reserves is a very interesting one, but the insight that since Treasury -- since the long-term Treasury amounts really went up during this time period, that sort of proves that Q.E. had little to no impact on asset prices is kind of wrong, too, because we also have a -- in the marketplace, had a notion of kind of what it's like to be investing at the zero bound, which is that, A, you don't get any yield on these securities, and, B, they're -- when interest rates go up, they're going to turn out to be a bad bet.

Now interest rates have not gone up the way people expected, so that was kind of wrong, but it was not irrational to think that way. And if you look at equities, dividends oftentimes have higher yields in some of these Treasury securities -- and, by the way, if managers run these businesses better, you get some upside from the performance of the businesses. So, that looks like a better place to be, in light of quantitative easing. So, that's the kind of second piece of this.

And the third piece is that this notion that there's sort of a stability benefit to issuing a lot of Treasury at the short end because of this felicitous (inaudible) temporarily mismatched duration; kind of means to me that you won't have less deposits. It means -- the result of which you won't have banks make less loans, which in -- for us, people of the markets, we think it's kind of good that consumers get money to spend, and businesses get money to invest, and banks serve that function. So, I'm not sure if it's a good thing for the aggregate demand goals of government to actually provide a large amount of substitutes for deposits that would, you know, I think, have a negative impact on economic activity at the margin.

So, those are just three observations (inaudible).

MR. WESSEL: Take a couple more, and then we'll have Jon Hilsenrath, and then Julia.

MR. HILSENRATH: Jon Hilsenrath, from The Wall Street Journal.

I wanted to take Glenn Hutchins's comment, and turn it into a question. The one thing that everybody here seems to agree on is that the Treasury and the Fed weren't coordinating in this. And I want to take that set of facts in a different direction. We had a financial crisis. The Treasury issued a lot of debt. The Fed bought a lot of Treasury debt and government-guaranteed debt. Why shouldn't we see the effect of these policies, if not the intent -- Fed monetization of government debt? That's one

question.

I want to ask a couple of others real quickly. One, Larry Summers, you were in the Obama administration during this big expansion of the Fed's balance sheet and the Treasury borrowing. Did you argue for the -- with your friends at the Treasury that there should be a more coordinated approach, along the lines of what you're laying out here?

And then, finally, for Mary Miller and Jason Cummins -- putting aside all this discussion about coordination, it is the case, I believe, that the Treasury's continuing to extend the maturity of the debt it issues. Given the findings in this paper, putting aside everything related to coordination, is it time to stop that policy?

MR. WESSEL: Okay, Julia, and then I'll take some responses.

JULIA: Sorry. Well, I was going to make the point that Glenn made -- that -- which, I think, is the point that Governor Powell made, which is that, you know, Treasury makes its decisions according to a sort of known reaction function, and then the Fed was the one reacting to that as given, and offsetting what the Treasury was doing, not the other way around. So, I think that's certainly how I also, as a market participant, was viewing things. And so the paper seems to have it kind of logically backwards.

But -- so Lou raised a point, though, that I think is really, really interesting and important going forward, which is, we now have a situation where, because of the LCR and the new regulations, the Fed is going to attempt to do something because of monetary policy consideration -- that is, get up off the zero lower bound. But because of these regulatory requirements, there's going to be this excessive demand for safe collateral, which will push down on interest rates.

And so we're almost kind of cart-before-the-horse, whereas, you know, the monetary policy objectives are going to be trying to achieve something, and how --

and should the Treasury respond to that? For example, by issuing more bills, so that rates can rise -- you know, giving more supply so that -- to facilitate the Fed's objectives.

So, you know, I think in the crisis, it was clear that the Treasury and the fiscal agent were, you know, doing what they had to do, and then the Fed was doing what it had to do -- taking that as given. Given this new world that we're about to go into, where the Fed is trying to raise rates, but -- I mean, I think -- I'm now just repeating my question. You get my question.

MR. WESSEL: Right.

JULIA: I would love to hear Mary's view on this in particular --

MR. WESSEL: Why don't we --

JULIA: -- and, obviously, Governor Powell, to the extent you can have a view on it.

MR. WESSEL: Right. So, Mary, why don't -- there were a couple of questions directed to you, Mary -- that one and Jon's, about, does the paper convince you the Treasury ought to stop lengthening? But you have to answer, because you're no longer at the Treasury. Jay will have an excuse, but you don't.

MS. MILLER: So, the historic average length of Treasury debt, I think, is 58 months. And today, the Treasury's at about 68 months. So, we're past the long-term average. And I think the low in the financial crisis was 48 months.

So, this comes up regularly. We talk about it with the Treasury Borrowing Advisory Committee. That's reported in the minutes of the meetings. And I think, for now, the decision has been to continue on the path that we're on. But I wouldn't be surprised if, in the coming years, it was revisited. There's no thought at the moment that we would stop what we're doing, but I think, you know, you do have to consider the environment, the structure, the amount of borrowing that you have to do. And I think that,

you know, it's likely to be revisited.

MR. WESSEL: And Julia's point about how the world may change, and the Fed is trying to raise rates, but there'll be this demand for short --

MS. MILLER: Yeah.

MR. WESSEL: How do you think the Treasury will respond ?

MS. MILLER: So, the Treasury's been very attentive to the regulatory environment and the world we live in today, which is one that demands quite a bit of high-quality, short-term liquid collateral. And it is one of the things that drove the development of floating-rate notes, which I think we should talk about more, frankly, because I think it kind of answers the mail, in terms of reducing, from our perspective, rollover risk of constantly rolling a lot of short-term debt; at the same time, enjoying a low cost of borrowing by pegging it to T-bill rates, and putting something in the market that we think can be a good substitute for high-quality liquid assets for a T-bill.

So, I think that, as the environment changes, we want to make sure that we're not starving the market of, you know, short-term liquid collateral; that we're providing what is a highly-valued resource. I mean, the world buys Treasury bills; it's not just the U.S. I mean, it is a global commodity, and we are attentive to that, and we appreciate the fact that the extension of average maturity has, you know, lowered the -- not the dollar volume, but the proportion in the overall debt structure.

MR. WESSEL: Jay Powell, do you want to respond to any of that?

MR. POWELL: Yes. I'll just say briefly that, you know, we are on the frontlines of bank regulation, and are well aware of the, you know, the liquidity demands. But institutions are going to have to be -- and we do understand that's something we got to watch carefully, and there will have to be assets to meet that.

MR. WESSEL: Before I turn to Larry, Jason or Lou, do you want to

throw anything on the table? Okay, Larry, there were a couple -- oh. Do you think the Treasury should keep lengthening -- do you agree with Mary that the time may have come to rethink?

MR. CUMMINS: I agree with Mary that I wouldn't be surprised if we consider it.

MR. WESSEL: Mary -- that's more verbs in one sentence I've ever heard before.

So, Larry, I think there were two questions directed to you. One was -- Julia and Glenn both said you got the direction wrong here -- that somehow, the Fed was offsetting what the Treasury did. And then Hilsenrath wants to know, where were you when all these decisions were made?

You may get more than one question -- you may get slightly more answered than that.

MR. SUMMERS: Jon, there's lots of independence issues. One of them has to do with the financial authorities in the White House. The honest answer is, I was -- I mildly made the points that -- the kinds of points that I've made here, but not with great vehemence, because of a sense that the White House should only pay a certain amount of attention to financial policy, but I certainly believed this at the time.

Look, we're generally -- nothing I'm saying -- we're saying -- properly understood as a statement that the Treasury should go gibbling and juggling around this debt management policy every six months as a kind of monetary policy.

I think it is reasonable to ask the question, should the Treasury, in light of everything that was happening for the last five years, maintain a constantly-announced, re-announced, and reemphasized quantitative contraction policy -- which is what, in substance, lengthening of the debt was. And I'm skeptical that it was a good idea for it to

have maintained a quantitative contraction policy.

And if it was a good idea for it to do that, should it have, in some way, recognized explicitly that that's what it was doing, and had some discussion of that be part of this carrying on of its policy?

Look, I think, in a lot of ways, you can view it either way. And I understand the position that it's good to term out the debt, because -- for a set of reasons. Risk premiums on long-term debt are low, or in some financial stability sense -- and, from that perspective, quantitative easing is problematic. I understand that perspective. I don't agree with it, but I understand that perspective fully.

What I don't understand is the perspective that quantitative easing is a really good policy, and so is quantitative tightening -- and so is quantitative attraction. So, I relate to Glenn's market perspective.

Two final things: Mary and I do agree on something here, which is good (inaudible) which is that floating-rate notes are an important and powerful innovation that makes a proper difference in the maturity structure, that achieves what we're trying to achieve in terms of having shorter-term debt. And it was very much Mary and her colleagues' initiative that drove that, and it was probably something that was overdue for the United States to adopt. So, I think that was a wonderful and important initiative.

And last, on behalf of my coauthors and I, thank Glenn for there being a Hutchins Center, and thank you for your leadership, David; thank the discussants for their very helpful comments that's given us a lot to think about, and thank everybody for being here.

MR. WESSEL: I can't add anything to that but my own thanks to all of you for coming, and we'll have a transcript of this discussion up online sometime in the next few days, so you can see for yourself that Larry Summers might have been mild

when he was in the administration, but thank God that's no longer the case.

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