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WEBINAR

THE DEBT LIMIT: WHAT IF…

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PROCEEDINGS

MS. SHEINER: Hello. My name is Louise Sheiner. And I'm the policy director of the Hutchins Center on Fiscal and Monetary Policy here at Brookings. I'd like to welcome you to our event, The Debt Limit: What if?

Our focus today is on how financial markets, the Fed, and the Treasury are likely to respond should Congress fail to act in time to prevent the debt limit from binding. We'll leave to others the all-important question of how likely Congress is to act before the Treasury runs short on cash and how to make sense of the partisan political maneuvering underway on Capitol Hill.

Before we get to our panels, I'd like to talk first about some of the basics. First of all, what is the debt limit? The debt limit is the legal limit on the total amount of federal debt held by the public. Once the debt hits that limit, the Treasury can no longer increase its borrowing. It can, of course, roll over existing debt, as that doesn't increase the total amount of debt outstanding, but it can't issue new debt. The U.S. government hit that limit of $28.4 trillion on August 1.

However, the Treasury has been undertaking a set of what are known as extraordinary measures, basically, ways of preserving cash by delaying making certain government investments, so that the government can still pay all of its external obligations. But these measures won't be sufficient much longer. The Treasury recently estimated that, by October 18, without an increase or suspension of the debt limit, Treasury won't be able to pay all of its bills.

And what then? Well, that's obviously a very important question. And the true answer is we don't know for sure. It depends on how the situation is managed, how long it lasts, and the extent to which investors alter their views about the safety and liquidity of U.S. treasuries.

How would the Treasury deal with the binding debt limit? Another thing we don't know for sure. The Congress has never allowed the situation to get that far. But in 2011, when the debt limit was only lifted at the 11th hour, we know from FOMC transcripts released years after the fact that Treasury did have a contingency plan in place. Under that plan, Treasury would continue to pay principal and interest on its securities. That is, it wouldn't default on its debt. Instead, it would cut all other spending. This time the cut required would probably be 40 percent or even more.

But according to the plan, the spending cuts would be accomplished by delaying payments rather than by giving them a 40 percent haircut. That is, they wouldn't send out Social Security checks with a 40 percent cut. They would just delay the checks until they had enough cash to pay them in full. So, at the beginning, that might mean up to a few days delay in Social Security benefits and payments to Medicare providers, payments to contractors and federal employees, et cetera. But over time, those delays would mount.

So the big questions are, of course, what are the costs of allowing the debt limit to bind? Is this a disaster for the economy, or is it just a minor setback? And what does that depend on?

Last week, my colleague, Wendy Edelberg of The Hamilton Project here at Brookings, and I put out a joint piece discussing this issue. We argued that, while assuredly a negative for the economy, the speed and depth of the economic costs would depend on whether investors were confident in time and on how long investors thought the impasse would last.

For the first few days of a binding debt limit, investors believed that the Treasury would continue making all interest payments in a timely manner. And if they thought the impasse would be short-lived, it's possible that the initial reaction would be muted. If instead there was a lot of uncertainty about the security of treasuries, perhaps the Treasury wouldn't announce that it was paying principal or interest, or perhaps there would be legal or political challenges that suggested the Treasury couldn't continue to prioritize bondholders over other people to whom the government-owed money. Their reaction could be much swifter with stock markets tumbling, Treasury markets into disarray, and panic all around.

Similarly, if investors believe that the impasse was likely to last a long time, and even if it was assured that treasuries were safe, markets could become worried with the large cuts to federal spending, even though they would eventually be made up once the debt limit was no longer binding, could derail the recovery and throw the economy back into recession. And then, once again, there could be a swift and significant market reaction, even in the early days.

But maybe, the market seems to be just a little worried. Yields are up on Treasury securities maturing near the expected so-called X date, the date the debt limit binds, but only by 5 to 7

basis points. But it's still early, and there's a huge amount of uncertainty about how financial market reactions will evolve as we get closer and, particularly, if we crossed that date.

That brings us to today's events where we will discuss the issue of the debt limit from the perspective of financial markets, the Treasury, and the Fed. First, we have a panel of experts discuss the issue of the debt ceiling from Wall Street's perspective. Next, we discuss how the Treasury, and the Fed might manage the situation. Both panels will be moderated jointly by my colleague, David Wessel, Director of the Hutchins Center, and Brian Sack, Director of Global Economics at The D.E. Shaw Group. I'll let them introduce the panelists.

We will have time for some Q and A with each panel. So, to ask a question, you can use Twitter or sli.do at #DebtLimit or email events@brookings.edu. Again, that's #DebtLimit at Twitter or sli.do or email events@brookings.edu. Thank you so much for being here. And I'll pass it over to David.

MR. WESSEL: Thank you very much, Louise. And thank you, everybody, for joining us. What we are trying to accomplish today is to look over the cliff and see what the abyss looks like. We're going to leave to other people the analysis of what Mitch McConnell really wants or whether the Senate will use reconciliation or cut a hole in the filibuster. Those are important topics, but this is not the group we've assembled for that.

We do have a terrific group. As Louise said, I'm joined by Brian Sack, who's Director of Global Economics, The D.E. Shaw Group, and who was, for several years, the Executive Vice President of the New York Fed and handled the Fed's purchases of treasuries. And the panel we've assembled has a terrific amount of experience. Alphabetically, we have Jay Barry, who's the Managing Director of Interest Rate Strategy at J.P. Morgan. He's been there for 21 years. Richard Chambers, who's the Head of Short and Interest Rate Products at Goldman Sachs. He's been in the markets for 15 years, the last six to Goldman.

Deirdre Dunn is the Co-Head of Global Rates at Citi. She spent a couple of decades in the markets, the last 10 at Citi. And for reasons I don't understand, she has a B.S. in Chemical Engineering from MIT, which may or may not be useful in today's discussion. And finally, we have Matthew Hornbach, who's the Global Head of Macro Strategy at Morgan Stanley, where he's been for 21

years.

I should note that all four of these firms are contributors to the work of Brookings, which we appreciate, but they had nothing to do with funding this particular event.

So, Deirdre, if I could, I'd like to start with you. So, I wonder if you could just set the scene broadly. We know the X date, the date at which the Treasury doesn't have enough cash to meet the obligations that's approaching. Janet Yellen says it's October 18 or thereabouts. Can you -- what should we worry about when we think about the market for U.S. Treasuries, the most important financial market in the world, and one which we learned in March 2020, has some fragility. What should we be worrying about there?

MS. DUNN: Yes. Thank you, David. And thanks for having me here to discuss this very important topic. While the broader Treasury market continues to function well in recent weeks, we are starting to see some signs of stress. It's most apparent at this point in the bills market, where we've seen dislocations of 20 to 25 basis points for issues that are maturing in late October and early November. We're even starting to see slight premiums for bills that mature even ahead of that drop-dead October 18 deadline.

Volumes have been laid on price action a bit choppy. We have seen some better selling in these issues from foreign and domestic real money accounts, just to reduce exposure ahead of any incident. Overall, though, I think the market is still focused on the timing of a resolution, more of a when not an if, at this point. We are within two weeks of that October 18 date, so I would expect increasing skittishness each day that goes by without resolution or, at a minimum, a meaningful change in tone from D.C.

Obviously, a big difference in this episode is that the Democrats can use reconciliation to increase the debt ceiling, while in previous episodes -- some previous episodes, the House and Senate were split. That said, the process can take up to two weeks, and each day matters. While the Fed has been silent on the role of the standing repo facility or RRP and that they may be able to play in the event of a technical default, these facilities, you know, could be very material. But they have been silent thus far.

All that said, I do worry that the broader backdrop of a very high reserve environment may be contributing to a false sense of complacency here. Twenty-five basis points may not sound like a huge move, but for securities that have been in a 3- to 5-basis point window for the last year through the election, inflation scares, pricing and repricing of taper, it's not an immaterial move. Contagion beyond the bill market to the broader Treasury market or equity markets has been mild thus far, similar to what we saw in 2011, where market volatility propagated through the system, really, just before the drop-dead date.

At that point, we saw significant cheapening in termed GC to higher yields, contributing to cheapening in cash products generally and, also, weakness in equities and an impact to the dollar. This may be exacerbated by the fact that industry-standard haircuts on repo transactions at this point are much lower than they used to be.

So, all of this can obviously bring a full suite of independent concerns around market functioning and volatility, procyclical margin calls from CCPs like we saw in the spring of 2020, but with some possible concerns about the future eligibility of U.S. Treasuries as collateral possibly, you know, in a tail event. A dash for cash without treasuries being a cash substitute, you know, I really hope we don't get there this -- get to that point this time around.

MR. WESSEL: Let me unpack that a little bit. So, what you're saying is, when we look at short-term treasuries, that is, treasuries that are likely -- that are due to mature about the time that Treasury says, I ran out of money, investors are demanding a little more return because they're worried that they won't get paid on time or get paid that well. I'm sure they think they'll get paid back eventually, but they might not get paid back on time. And although 25 basis points, it's a quarter of a percentage point, that doesn't sound like very much. We're in an environment where other rates are hovering very close to zero. So, it's a pretty big thing.

So, the repo market is where people lend money to each other over a very short term, and they pledge treasuries as collateral. And are you suggesting that, maybe, some people will be reluctant to take that collateral because they don't know that it's going to actually be as solid as they used to think it is?

MS. DUNN: I think that's possible. It's also possible that it's true just for certain specific CUSIPs if there were something like a technical default in the form of an extended maturity. You know, I think the downstream processing of that may make people reluctant to try to manage those operationally.

MR. WESSEL: And you referred to CCP. So, those are central counterpart federal clearinghouses where, instead of me and you trading, each of us trades with a clearinghouse, and the clearinghouse is the counterparty to me and to you. And when the price of a security goes down, the clearinghouse wants more margin. They want more of a deposit, in case things go bad. And we've seen that that can be a kind of -- there's been some friction in that process in the past. And I think what you're saying is that, if a whole lot of short-term treasuries go down in value, that could complicate this process. And it could mean that people who -- institutions that are already under stress might have to come up with even more treasuries in order -- or more cash to make their positions work. Is that a fair idea?

MS. DUNN: Yes, I think that's true. I would also make the important distinction that it doesn't necessarily need because the price of treasuries change. I think if, you know, broader-risk assets move dramatically and market volatility increases, there can be an increase in the call of initial margin, which is, to protect against the market volatility, is not associated with just an underlying security price.

MR. WESSEL: Okay. And finally, and I'm sure we'll talk about this repeatedly during the afternoon, you mentioned the Fed's repo facility. So, that's where the Fed would take a treasury that someone has and give them cash or reserves, right? And you said they've been silent. But what's the option that the Fed has here? What is it that the Fed might do if things get messy?

MS. DUNN: If the Fed ensured that maturities with possible -- extended maturities, right, should we get to that point where if a bill matures and instead of being repaid it is extended by one day, let's say, if the Fed ensures that those bills are still eligible for many of the heavily used clearing and settlement systems, things like Fedwire, and they accepted as collateral in exchange for cash, that would go a long way to help, you know, sustain the market through that period.

MR. WESSEL: Great. Brian?

MR. SACK: Great. Thanks, Deirdre. I want to turn to Rich. I think you did a great job describing, you know, a lot of the possible pressure points broadly and raising, you know, some of the key

issues. I wanted to give Rich a chance to just also weigh in on that broad landscape. And I'll note, you know, it seems like a lot of the focus at the moment is on the bill market, and a lot of the concerns, you know, that arise about Treasury market functioning kind of start with the bill market and, also, focus a lot on the repo markets, which David mentioned, is a market for helping to fund Treasury positions.

So, I was wondering, is that the area where the near-term pressures are going to be most acute? Is it sort of the epicenter here? Hopefully, you could comment on that or just on the broad landscape as well.

MR. CHAMBERS: Well, thank you, Brian. Thank you for the time today. I think, when we look at the upcoming drop-dead date in terms of risk management and looking at what the market is pricing in, there are three scenarios. Scenario number one is there's a last-minute deal, which is what we're all hoping first. Scenario number two is there's a technical default on select item of Treasury securities, whereby maturity gets extended day by day. But we fully expect to get the principal paid back. And I think, you know, we can all agree that, even on in the event of a technical default, you know, that investors will be made hold on their initial investment. Scenario number three is investors won't be made hold when their initial investment.

And, you know, let's park scenario three because I think we can all agree, you know, that that one -- you know, we should all agree that that will not happen. In terms of what scenario -- would the market is pricing in right now, the market's pricing in scenario one, the market is pricing in a last-minute deal. We have a very isolated move in the bill market, as Deirdre and Louise quite rightly said over at 67 basis points for anything past October 18 to the middle of November.

Interestingly, in the last two to three trading sessions, we've seen an increase in risk premium in later November date. So, the market is anticipating an extension -- potentially, an extension of the drop-dead date. And the contagion is idiosyncratic to the bill market right now. And, you know, we have in unsecured dollars in Fed Funds, for example, we're pricing in a tiny amount of premium of half a basis point. In the repo market itself, in the silver derivatives market, we're pricing very, very little premium. And in offshore-dollar funding costs, such as cross-currency basis in FX swaps, as well as the CP market, there's very little to no premium price.

So, very idiosyncratic to the bill market, such that, you know, I think the market -- I think, excess liquidity plays a part in this. And, you know, where the market cease and, you know -- and I would expect as we continue to get closer to October 18, a gradual cheapening and more cheapening of that sector of the bill market. You know, when you look at the total outstanding of T-Bills between mid-October to mid-November, it's roughly 1.2 trillion. And when you look at those who may -- you know, when you look at the -- well, let's say the money from community holds based on the August reports, it's roughly 300 billion. And, you know, against that, we have 4 trillion at the Fed at IOER.

So, the market still feels that, even in a world where we may see, you know, some liquidation into the drop-dead date, an increased yield premium in an isolated sector of the bill market, and we -- you know, we think that the market believes, and I believe, that the repo market is still in a sound footing and in a sound place based on the amount of excess liquidity we have in the system and the ability for U.S. G-SIBs and other banks who are putting money at the Fed at IOER to potentially rotate into the bill market, if and so, when the opportunity set became appealing enough.

So, that's kind of where we are in terms of market pricing in very front-end markets. Bigger picture when you look at the Treasury curve and further out the curve on the macro backdrop. And, you know, we've had some shaky moments like last Friday where it became top-of-mind across, you know, the global investor base where risks sold off. But, in general, risk is -- you know, risk hasn't done a lot on this upcoming event, and as it looks at bill pricing and it assumes, again, a last-minute deal.

And -- but it's worth noting that, if we were to get to a technical default, you know, we can expect, you know, a significant repricing of risk. It's unheralded. It's unforeseen. And similar to the standing repo facility that was put in place at 15 basis points as the market priced out potential funding tails further out the curve and the Treasury curve, I think, with any -- if we got to a technical default, I think the market will increase the amount of risk premium in the Treasury term structure, as well as pricing further technical default out the curve out to 30 years.

And, you know, the other point to mention is sentiment. And sentiment is big in terms of the plumbing of the front-end. You know, a positive sentiment in a high-access liquidity environment leads to low volatility. And, you know, if we get to the event where the day before the drop-dead date the

Treasury call the Fed and start to extend maturities on significant -- on an array of securities and the Fed will then have to call FICC, BONY. And, you know, there's been a lot of preparatory work done for this.

But it's -- again, it's unforeseen, and these pipes have not been tested. So, there -- you know, it increases the amount of operational risk in the system. And I would expect, on the technical default, we will see contagion across both onshore and offshore cost of funding markets, as well as all risk assets.

MR. WESSEL: Can I -- Brian, can I just --

MR. SACK: I mean, just to talk through a little bit of what a technical default looks like. I kind of -- I wasn't sure when they'd do this. But I think it's helpful, Rich. Rich said a lot of this, but just to be clear for everyone. If Treasury gets to a point where it believes it cannot make payments on the debt for the next day, it has to decide the night before for this to happen, there -- an operational plan has been discussed under which the maturity date for the securities coming due the next day in Fedwire would actually be extended a day.

Why is that? Well, that is because Fedwire system, once we hit the maturity date, the security disappears. So, if there were not an extension of the maturity date on the Fed system, on Fedwire, the securities would suddenly not become transferable anymore. If it couldn't be traded, risk couldn't be moved around. So, essentially, the way around that is to extend the maturity dates so that, you know, no payments are going out. But the securities can stay on the systems and still be used in trading, in Fed operations, and so on.

As Rich said, that's a very -- well, first of all, it's a very delicate procedure. It requires a judgment the night before that that's going to happen. It requires, obviously, the actions that take place on Fedwire. But as Rich said, there's a number of systems, of course, you know, tied to this. You know, there's FICC, which is the CCP for dealers. It's all the dealer systems themselves. There's the clearing banks, you know, who custody the Treasury securities. There's all the dealers. And (inaudible) have their own systems that are tied to this. So, there's a wide set of private sector systems that would have to adjust, likewise. And I think some of the operational risks that Rich is mentioning have to do with whether that all collectively works, you know, smoothly in a process that we've, you know, obviously, never done.

MR. WESSEL: So, it's a little bit like -- I'm just trying to come up with the right metaphor. I'm not sure what it is. But it's a little bit like you have this big skyscraper and it has all sorts of fire prevention things in it, and the local fire department has got open ladders that can go up at least halfway up and they have plans. But no one really knows for sure if there's a fire in this skyscraper, whether everything will work as it's supposed to because we've never had a big fire in this fire -- fire in this big skyscraper.

So, we're kind of like that. People -- I think what you're saying Brian is, people have been thinking about this but they haven't had an occasion -- thank the Lord -- to try it. And we can't be sure that everything will work quite as smoothly as they hope. Is that fair?

MR. SACK: I think that's fair. And the one of the issues is you have a lot of systems across -- in different locations across different players in the market that are critical to that market infrastructure that they have to work together under a procedure that itself entails a lot of uncertainty.

MR. WESSEL: Right.

MR. SACK: You know, I think --

MR. CHAMBERS: If I have to add on that, you know, if you look at the June 2013 minutes, you know, you have to fully expect transferability of these securities and the extension part of the securities if you assume the operational side will be sound. I think the key, just to go back to market pricing again, is that -- and Deirdre pointed out, is that you will have idiosyncratic requests from the investor base. Whereby, you know, you may see, you know, higher haircuts on treasuries that get posted to exchanges. You may see individual bilateral CSAs refusing certain parts of Treasury.

So, the functioning and overall plumbing of the market will still get disrupted, even if we have full transferability of these securities, which clearly will help. And on top of that, the market -- when you look at a scenario, if we had a technical default for three days or even to five days, that means that there is, you know, one would expect zero interest return on those Treasury securities for that period of time, which, by definition, the market will price in a higher term structure for treasuries and increase general borrowing costs for the Treasury going forward.

MR. WESSEL: So, Jay, let me turn to you. And let me just mention two things. One is --

well, three, actually. So, Richard Chambers made two points. One is he referred to the IOER. That's the interest on excess reserves. The banks have a lot of reserves at the Fed. They have deposited a lot of cash at the Fed. And Richard was suggesting that that gives the Fed some -- that gives the bank some ability if there's a problem in the Treasury market, they have a lot of cash, which is not where the way we were before.

Secondly, he said that this could propagate through the yield curve. In other words, the Treasury could end up yields on treasuries and presumably then what the U.S. Treasury has to pay at its borrowing as it auctions more debt would go up, then it would have cascade through the thing. So, this isn't just a momentary glitch. You couldn't have long-lasting things.

And third, I think, importantly, he talked about sentiment. And I think that's a little bit of way of saying like you never quite know what's going to happen when something unprecedented happens, particularly, when it's something that people in the markets -- and, indeed, people like me -- assume that Congress will never take us there. But we have to entertain the possibility they won't.

So, I wondered if you could talk about one or more of those things. And then, secondly, if you're hearing it all from your clients about this. Are people around the world beginning to worry about this? Are they paying attention?

MR. BARRY: Sure. Thanks, David. And thanks for having me today. So, I think, you know, in your first question in the discussion of reserves, you know, it's the abundance of reserves and liquidity in the system right now that has, I think, helped prevent this from becoming a bigger episode thus far, because the Fed's balance sheet having grown so significantly with rates floored at zero has created that precondition. But when you talk about the IOER and the expected funds rate going forward, I think it stands out.

There's already been this discussion of what's happened in the bill market, that those bills trading in the late part of October to the early part of November are trading above the expected funds rate, the expected IOER rate over that period. And in the context of such abundant liquidity, I think that stands out as a source of concern.

You know, now, where that is, I mean, we've been through five of these episodes over

the past decade. And with, maybe, at one extreme end of the example, there's 2011 and 2013, but on the other, there's 2019, that we're probably somewhere in the middle, that the moves in the bills market have been relatively small in the context of, say, the 50 to 60-basis point cheapening we saw in short-term bill is in 2013. But granted much more than we've seen in either the last two episodes that it's been pretty muted thus far. But then as you get closer to the, you know, expected drop-dead date, that you'd see a bigger reaction there.

And I think related to your third question about what we're hearing from investors and what they're asking me about, I mean, it's one of the main topics that we're attempting to address in the Treasury market right now. You know, one, when does this potential technical default date hit? And two, all the procedural and operational discussions have been talked about.

But I think it's some of the investor's actions that have gotten us here thus far. I mean, we look at what's happened this year, not just with the backdrop of 4.1 trillion in reserves, but the bill market which has shrunk by $1.2 trillion in size this year, that you've seen any cheapening in bills, I think, is a representation of concern out there. And I think short and specific investors like money market funds who, while the risk of a technical default may be relatively low or the probability is relatively low, the risk of it occurring is much larger for their portfolios. And they're taking active steps in order to mitigate this risk. And I think this is what a number of market participants are doing right now, taking active steps because they think the risk is low but they need to be prepared in case it happens.

But even with that, I think the reaction has been relatively muted because there's been other less constraints investors in this sort of very abundant liquidity world who seem to be stepping in to buy those securities every time they've cheapened. And it happened, I think, on Friday afternoon after the sort of real big move in T-Bills on Friday morning. And it happened once again yesterday.

So, I think, you know, it's everything that we're being asked about right now. And I think there is active planning going on from the investor community, which is why we've had this back-and-forth at the short end of the curve. But the risk seemed moderate or maybe at a five relative to sort of where we were at a 10 in 2011 and '13, because to your point, we haven't seen it propagate out the yield curve. I mean, in 2011, perversely enough, long-term yields declined after S&P downgraded the U.S. because of

this very large risk aversion and flight to quality that occurred.

And we haven't seen any sort of evidence of that thus far in the Treasury market because yields have been rising in recent days amid higher inflation expectations. But I'd expect that the closer we get to the potential X date, whether it's October 18 or slightly beyond that, that you start to see this sipped into the long end of the curve. And not just in outright yields, but in spreads. And then how treasuries trade relative to off balance sheet derivatives as well.

Because some of the work that we've done suggests that, you know, every rating downgrade, not from a specific rating agency, can chip in, you know, sovereigns by about 10 basis points relative to (inaudible) off-balance sheet derivatives with the same sort of maturity. And we haven't seen that happen as of yet.

MR. WESSEL: So, two questions. One is, when you say we're 5 on a 10-point scale, is that because people in the markets think probably Congress will work it out? Or is that because they think this isn't going to be such a big deal, even if we go over the edge?

MR. BARRY: I think it's more the former than the latter. I mean, we've been through enough of these episodes over the last decade, that there's an expectation that, ultimately, Congress will find a way to reach an agreement. But at the level that that concern will grow the closer we get to October 18 and beyond.

MR. WESSEL: What do you think the possibility is that there's conclusion beyond the Treasury market, like mortgage banks or other securities? Are there more --

MR. BARRY: I think, you know, as we see broader sources of concern, you'd expect to see underperformance across risk assets. And, you know, I think we've seen that prior --

MR. WESSEL: All right. So, underperformance across risk assets. That means the price of stocks and bonds go down, right?

MR. BARRY: I think of riskier bonds go down, again, I think it's very possible that, you know, treasuries might actually rally and retune relative to, say, mortgage and credit product, because even in the example of a -- an extreme example of a technical default with a downgrade, it's likely to mean a flight to safety. But yes, sort of weakness in those other assets.

MR. WESSEL: I see. So, ironically, when the U.S. Government screwed up and people get panicky, they tend to sometimes buy U.S. Treasury bonds, the longer-term ones, even though it's -- the U.S. is the cause of the disturbance, right?

MR. BARRY: You know, I think that's right, yeah.

MR. WESSEL: Brian?

MR. SACK: And I think that's -- it's important to, you know, know that that's what happened before, but we have one observation here, I think. So, I think we should be cautious about that as well. You know, I wouldn't predict that a downgrade is always going to lower U.S. Treasury yields. And I think, as Jay said, expecting some cheapening relative to, you know, interest rate swaps or other non-Treasury and trade assets, risk-free assets, would probably be -- it could be likely. So, I just think there's a considerable amount of uncertainty about what would actually happen if we had another downgrade.

MR. WESSEL: So, we're going to turn to Matt, right?

MR. SACK: Sure, yeah. So, we've talked a lot about, you know, the broad set of pressures that could emerge in market dynamics. People have mentioned the, you know, 2011 and 2013 episodes in that discussion. But I thought it'd be useful to ask you just, you know, more explicitly to focus on that and think about or comment on how this situation differs from what we faced in 2011 and 2013. Are there similarities? Are there differences that would make this better or worse? You know, what should we keep in mind in making that comparison?

MR. HORNBACH: Yeah, great. Thanks, Brian. So, I think the main differences to highlight really have to do with the plumbing of the frontend and the different facilities that the Fed has put into place since 2011 and 2013.

In 2013, just before that debt ceiling episode, the Fed created the reverse repo facility, which has grown substantially over the last few months, having breached around 1.6 trillion on a quarter end a couple of days ago. So, that is certainly a big difference. And this liquidity dynamic is something that Jay alluded to earlier.

The reverse repo program does serve as an investment alternative for money market

funds. So, as money market funds direct cash away from T-Bills, particularly T-Bills trading around the X date, that money market funds can leave that cash in the Fed's RRP facility, ultimately limiting the degree to which repo rates can fall below current levels around 5 basis points.

You know, on the other side of the Fed's target range, the Fed formalize the standing repo facility in the FIMA repo facility at its July 2021 meeting. And while these facilities are unused at the moment, and we do think that there's a non-zero probability, that they could serve a useful role, should the debt ceiling lead to a default scenario this time.

In the case of a default or even leading up to a default, dealers and other banks signed up as counterparties to the standing repo facility could, in theory, use the SRF to fund effective CUSIPs should repo rate -- should market repo rates for those CUSIPs trade above the 25 basis point in a minimum bid rate that's offered to that.

MR. WESSEL: Can I just interrupt you just for a minute? So, I wanted to make sure people understand that. So, you're saying that people who hold treasuries that might be a little tainted because of what's going on could give them to the Fed, and the Fed would give them money. FIMA refers to -- it could be foreign central banks. Standing repo facility refers to institutions in the U.S. around a list of approved counterparties. Right? Am I close?

MR. HORNBACH: That's exactly right, David.

And, of course, we know that foreign central banks are very big investors in the T-Bill market. So, this could be possibly relevant for their investment behavior in a default scenario.

So, suppose that, you know, an effective CUSIP here was trading, let's say, at 45 basis points, in the secondary market, you know, if a dealer were to buy those securities and then be able to fund them at 25 basis points in the standing repo facility, then they could net a 20 basis-point yield pickup, which, of course, is above the current 15 basis points offered on reserves held at the Federal Reserve.

So, you know, at some point, there could be the possibility of some value investors taking part in the marketplace. But, you know, there are a lot of questions surrounding that still. You know, even though the economics of this trade sound reasonable, there's some dealers may still avoid trading in these affected CUSIPs or other investors may avoid trading in these affected CUSIPs due to their

fiduciary responsibilities.

So, you know, the other thing to make note here is that, you know, balance sheet in the marketplace is oftentimes valued very highly. And there may be balance sheet implications to investors to use these types of facilities that are currently in place today.

MR. WESSEL: Okay. So, one more thing is a CUSIP is just an individual security, you know. It could be a three-month T-Bill. It could be a six-month whatever. And you're saying that, if one consequence of this is the rates on those go up because people think they're riskier, some people might say, hey, I can make -- I'll buy them because I think the Treasury is going to be eventually good for that. And that could limit the amount of much rates go up. That's basically what you're saying, right?

MR. HORNBACH: Absolutely. You know, the other big difference today is just the size and scope of the market. And, you know, previous speakers have already alluded to this. But, you know, for example, you know, the size of the T-Bill outstanding market today is around 4 trillion, of which, you know, almost a trillion is set to mature between October 14 and November 12. So, it's a quite a large amount of T-Bills that are set to mature.

And, you know, for a comparison, in 2011 and in 2013, the total amount of T-Bills outstanding was much smaller. I mean, roughly $1.5 trillion smaller in each episode. So, you know, the size of the market is significantly different today than it was in 2011 and 2013.

Maybe just one additional factor that's quite different today -- and, again, it's already been discussed, but I think is important to reiterate -- is just the amount of liquidity in the market today versus back then.

You know, the central bank accommodation through the quantitative easing programs is certainly much larger today, not only, you know, in the United States but also outside of the United States, where, back in 2011 and 2013, the European Central Bank was not as -- was not involved in the quantitative easing programs as they are today. So, tremendous amount of liquidity, which I do think, you know, should there be a technical default scenario, will be liquidity that could ultimately help to moderate the degree of risk-off price action that we might see in the equity market or in the corporate bond market or in other markets given the liquidity dynamic that exists today.

MR. WESSEL: Okay.

MR. SACK: I want to ask you about the standing repo facility. So, I think the Fed doing repos against Treasury. In other words, providing funding to the market for people holding Treasury collateral. I mean, that's a very logical response to the kind of pressures that we're talking about here where particular securities are under pressure. The yields are higher, the repo rates are higher, and we see these pressures.

In 2011, so I was running the debts of the New York Fed, Bill English was running monetary affairs down to Federal Reserve Board. I'm going to front-runner him a little bit here. But, you know, as we so pressures build, you know, it largely came up, whether the debt should -- we get to do the repo, and -- or do RP transactions, but at that time, you know, essentially, the Desk kind of directed it for the federal funds rate, not for the repo rate. And it wasn't clear, just from the directive to the Desk that it had to do repo. And so, this was actually a policy issue we talk about is, is there a case to do repo just to deal with the Treasury market even if the Fed Fund's target is going to be hit?

Now, as you said, it's a different situation because the FOMC has decided to implement a standing repo facility. It just kind of automates the idea, the outcome that they will do repo if we see pressure in the repo market.

I guess, the question is -- so that seems like it helps the situation. I think the question is, is it enough? And you mentioned balance sheet, which, I think, you were alluding to this. But if the set of counterparties for these transactions is, you know, a finite set of dealers who then have to, like, intermediate and provide that credit to the market. How big of a constraint is that? You know, I think -- I mean, I'm just curious if -- you know, we've seen in the past, you know, it's hard for dealers to intermediate very efficiently into a market that's, you know, very, very large and with a lot of like one-sided demands in it. So, is that a concern, or will it work pretty well?

MR. HORNBACH: Right. Brian, I think it's definitely a concern in your right to raise that issue. And I think, ultimately, it comes down to how the regulators of the banks end up dealing with balance sheets that may be bloated temporarily as a result of this type of intermediation. You know, are they willing to look past sort of a very technical situation that is likely not to last very long, and therefore,

you know -- perhaps, not to turn a blind eye, but perhaps, be more accommodating in their thinking about, you know, the changes in ratios that may result from that balance sheet expansion. I think, ultimately, it comes down to their willingness to help the situation in the near-term versus, maybe, some of the longer-term applications if the balance sheet were to remain inflated.

MR. WESSEL: Deirdre, can I ask you a question? What we've been talking is -- we keep using the word technical default, which means the Treasury doesn't pay interest on the debt. But as I understand these scenarios in the past, there was talk that the Treasury would prioritize interest. And so, that -- let's say that we hit the debt ceiling binds and there's chaos, but they continue to make payments -- interest payments on outstanding treasuries. Does that, like, make everybody feel -- breathe a sigh of relief? Or are we still going to have some of this unsettledness that we've been talking about?

MS. DUNN: So, I think there're two factors. One is let's set the debt and interest payments aside for a second. What would they do if not -- you know, if prioritizing -- what are they not prioritizing if they're prioritizing debt and interest payments? And that, you know, depending on the -- how long any situation lasts does have real implications for, you know, the broader economy and many of the consumers, right? There are payments in the beginning of November, whether it's Medicare, Social Security benefits, active duty members of the military, et cetera, right? So, certainly to -- if they do prioritize debt and interest payments, that is what would be at risk once we got to early November, and the payment dates there.

In terms of within prioritization of interest rate payments, I think there's a distinction between coupon payments on outstanding securities and bill maturities. So, everything that we've spoken about thus far in maturity extension of bills, the one day, sort of, announced that we're changing the maturity to ensure that things are still eligible on Fedwire and can settle and the Fed Funds them, et cetera -- that applies to bills market. I think missing a coupon payment on an outstanding bond -- not the principal repayment, but just the coupon payment -- likely brings different considerations around how to value that security -- I mean, the valuing of the securities matters and an extended maturity as well, but I think it's a bit more complex, you know, in a 10-year bond that is now missing a coupon payment for a period of time, you know, and perhaps trades more electronically and so on and so forth. So, I think that's

an important distinction to make.

MR. WESSEL: So, the bills -- if you own a Treasury Bill with short-term security, you don't get an interest check like you would on a certificate of deposit. You just get your money back when it matures with some extra money to cover the interest. So, what you're talking about there is the difference between a T-Bill when that happens as opposed to buying a 10-year bond where every quarter a month or whatever they send an interest check out?

MS. DUNN: Yes. So, in either case, I think it's most likely that they prioritize coupon payments and roll bill maturities because I think it's operationally easier. In either case --

MR. WESSEL: So, roll bill maturity that I have a 90-day Treasury Bill that matures on November 20, and they say, guess what, now it matures on November 21 and maybe it'll be November 22. We're going take it a day at a time.

MS. DUNN: Yes, on the evening of the -- you know, at some point on the day before the 19th, so that it can still be eligible and -- FICC, as Brian said, they announce a one-day delay. I think the timing of that announcement is critical because the Treasury would need to give, you know, all of the various companies that have systems that depend and connect to FICC time to adapt as well.

MR. SACK: Yeah. I think what's likely to happen is all debt payments get delayed. And if it's a principal payment, the maturity has to be rolled back. If it's a coupon payment, there's no rolling back of the maturity, but that coupon does not go out. But the fact that we're talking about, like, whether coupons get paid and principal doesn't or vice versa, I mean, this just highlights the uncertainty that we have in this environment, I would say.

MR. CHAMBERS: Yeah, I would agree. In terms of the guidance so far that we've been working with and its all-or-nothing coupons plus principal, if all of them can't be paid, I think there will be just an extension on maturing securities. I think in terms of prioritization it's really -- it's the other stuff. It's Social Security, it's Medicare, et cetera, that really is an unknown for us, and it's a different payment methodology. Technically, you know, it's still an unknown. Can it actually be done? And I think -- so, I think in terms of, you know, from a Treasury market standpoint, you know, I would expect coupons and principal to be all or none.

In terms of valuations, you know, we have talked to -- you know, when you look at the valuation methodology on technically defaulted securities, and there's no perfect system, you know, the advice is -- you know, there are vendors that supply different clearing exchanges as well as obviously, you know, what margin dealers -- what margin departments of big -- large U.S. dealers depend on. And in theory, on a defaulted security, it's minus -- you know, it should be easy. It's discounted by the funds rate if there's no free and available price. But as Deirdre said, for missed coupons, it gets a little bit trickier in terms of, you know, seeing a transparent price on missed coupons.

MR. WESSEL: So, I got a number of people in the audience who want to know if any of you take this trillion-dollar coin thing, which Janet Yellen called a gimmick and rolled out today, seriously. I don't want everybody to speak. Does anybody have a view on the trillion-dollar coin that they'd like to share? This is the idea that the Treasury could somehow mint a trillion-dollar coin, give it to the Fed, and the Fed would give them a trillion dollars. So, Jay should I --

MR. SACK: You're asking who would like to disagree with Janet Yellen?

MR. BARRY: I for one will not disagree with the Treasury Secretary in this regard. And I think it goes down a very slippery slope even discussing the trillion-dollar coin, right? Because I think it puts the independence of the Federal Reserve at risk and it more -- could potentially more closely align the Treasury Department and the Fed. And if, you know, some of what the Treasury market derives from its status as the sort of risk-free benchmark globally and benefiting from lower interest rates than most other currencies globally, it's, I think, the regularity and predictability of what the Treasury does, but also I think it's independent central bank policy as well, which is not sort of aligned with what the Finance Ministry is doing. So, I would very much agree with the Treasury Secretary there.

MR. WESSEL: Right.

MR. SACK: So, I wanted to zoom out a little bit, because it seems as if -- you know, we've observed some fragility in the Treasury market in recent years. You know, obviously, we had a serious disruption in 2020, you know, granted an unprecedented shock, but it took considerable policy action to restore market function -- but that was not the only case. We've had other episodes including earlier in 2021. And I was just -- I was wondering if, you know -- I mean, well, not only that, and so in

response to that, we have a bunch of government agencies and private sector groups actually trying to, you know, make proposals and initiatives to improve the resilience of the Treasury market, right? You know, so the fact that we're here talking about, you know, the possibility of missing a payment and all the market stress it will create I think is somewhat interesting in that context. I wanted to know what to make from all that -- these episodes of fragility. Is that a reason we should be even more worried about this situation? This has been tied to just the size of the market and maybe the size of the repo market related to that. So, we're just in a situation where the market is more fragile in a general way that's particularly problematic if we get into this episode.

MR. HORNBACH: Brian, maybe I can offer you just a comment about the importance of confidence in not only market structure, but in also the government's willingness to make good on its debts. And this is -- this concept of confidence plays a part not only in some of the technical issues that exist in the Treasury market that have come to bear in terms of volatility over recent years, but also plays a larger role in how the economy evolves and how the effectiveness of monetary policy to guide the economy towards the Fed's goals.

So, you know, I know this isn't a specific answer to the technical question that you might be asking, but I think all of this plays a part through confidence. And I think it's incumbent upon policymakers to respect the importance of confidence in our marketplace and do the right thing.

MR. CHAMBERS: Yeah. I think when you look at -- compare events to March 2020, September 19, and relative market positioning and treasuries, demand for Treasury leverage, and repo balance sheet, et cetera, we're close to all-time highs I think, and -- I think when you -- when we were at the steeper end of the demand curve in terms of excess liquidity, i.e. -- you know, the Fed had drained a lot of excess liquidity out of the system.

When you look at where we are right now, the -- you know, we obviously have -- you know, we've -- you know, it put a huge amount of excess liquidity into the system. We have 4 -- over 4 trillion of excess reserves. We have 1.4 trillion at the RRP. And demand for Treasury leverage is close to five-year to six-year lows, and we're -- and the marginal buyer of treasuries don't need repo balance sheets.

So, I think this issue was a credit risk issue. This issue was -- is actually looking at the credit worthiness of a Treasury bond versus before the contagion started with the cost of leverage in treasuries and in general, the -- what it costs to hold a treasury for a period of time if you were not an end-user or investor. And so, I think whilst both end up affecting the general price of treasuries and Treasury swaps and the relative value of Treasury versus swaps, and I think they're coming from -- we're coming from, you know, two different sources of risk premium.

MR. WESSEL: So, you're saying that we might have some -- you can't just look at this in basis points, that when you talk about the credit worthiness, I mean, that's like kind of a big thing to say -- worrying about the credit worthiness of the U.S. Government. That could have repercussions that we can only imagine at a time like this. And so, is that -- am I getting that right? So, there's all this money --

MR. CHAMBERS: Yeah.

MR. WESSEL: -- sloshing around. I get that there's plenty of liquidity. There are all these facilities. The Fed has a big fire hose. But I think what you're saying is that there may be some other things going on here that we should worry about.

MR. CHAMBERS: Well, all our valuation systems assume the Treasury is at a risk-free rate. They're our benchmark. And if you're buying a one-month Treasury and you don't get your principal back a month later, but you get it back a month plus seven days later at zero rates for that seven days, one has to reevaluate --

MR. WESSEL: Right.

MR. CHAMBERS: -- their models. So, you know, I think that's the worry on a technical default. Whilst we think operationally were set up -- whilst, you know, we think we have a blueprint from the 2013 and 2011 minutes, it's really the knock on VaR shock that (inaudible) to risk markets and to our own models in terms of what we ascertain to be risk-free and not.

MR. WESSEL: Thanks. Deirdre, I think you were trying to get a word in.

MS. DUNN: Yeah, I think it's just also important to add I agree with, you know, what has been said. But at the same point, if I look at the amount of time and resources and investigation spent by many institutions -- you know, Brookings included, but the G30 Report and everything else that we've

seen, as you know, I think we tried to get more educated on how perhaps changes in broader market structure over the last five to seven years have impacted Treasury market liquidity and functioning. It's a little funny that we are somewhat self-inflicting more questions, you know, while at the same time doing robust exercises to try to understand, you know, potential other exogenous issues.

So, you know, while I agree this is more of a credit question, which could have long-term implications around the investor base, especially potentially foreign investors, you know, and frankly to the extent, you know -- I mean, as a bank, you are told it is a high-quality liquid asset, right? That's part of the definition. But I do think there is a bit of irony, if you will, in the fact that we are spending so much time and resources collectively, you know, Treasury and many agencies and many market participants on trying to understand the market while, you know, introducing this new risk that didn't need to be here.

MR. WESSEL: Right. Brian, I think we have time for another Brian Sack question. So, make it a good one.

MR. SACK: So -- right. So, we had a lot of focus on the potential for near-term disruption, which, you know, could be chaotic, could affect financial conditions, the economic outlook sharply. And then there's also the question which just came up, which is over time, what does it mean for Treasury demand, right? So, we are -- you know, we're at a point where the debt-to-GDP ratio has gone up dramatically. It's going to continue to go up for some time. You know, we are issuing a lot of debt. We have a lot of debt. There's a lot more debt coming. You know, if treasuries cheapen, you know, 20 basis points relative to swaps, you know, that's $50 billion of additional interest costs per year once we get out to say 10 years from now.

So, I guess the question is, you know, in its environment with the increasing Treasury issuance, you know -- I mean, how worrisome -- if we create these events in this uncertainty, you know, how worrisome is this for, you know, end demand for Treasury securities? There's been a lot of focus on foreign investors. I want to know if that's, like, the right place to focus or is this just a broader question about whether Treasury -- demand for Treasury securities could suffer and the Treasury could end up having to fund itself on much less favorable terms?

MR. BARRY: If I can step in, maybe, and answer that. I think, you know, it's -- the focus

has been on foreign investors and I think -- you know, we see that the Foreign Chair of Treasury Ownerships declined pretty sharply from its peak about a decade ago, and I think it's been domestic investors that have been able to step in and sort of fill that demand gap, whether it's commercial banks or mutual funds or LDI investors.

But I think, you know, more medium term -- and this is something that the TBAC has taken up in the past as well -- is that there is a concern, as deficits remain large, where this demand will come from. And I think we've been fortunate for the past year and a half that there's been very strong U.S. commercial bank demand because there's been the growth in reserves that has brought with it -- growth and deposits over and above loan growth -- but we can't expect that to continue forever. And at the same time, when, you know, some of the temporary exclusions from the leverage ratio for treasuries and reserves could potentially make banks more leverage constraint down the line, I think, you know, not just for the near term, but for the medium term it means that while we've been fortunate that domestic demand has stepped up in the face of waning foreign demand that that may not always be there. And I think it -- circling back, Brian, to your question before -- it means that we still -- regulators and policymakers still need to deal with some of the unanswered questions about solutions for the Treasury market to make sure we can continue to intermediate and remain the sort of global pricing benchmark that we are.

MR. WESSEL: Right. And so, I think we're going to leave it there. But I think Brian and Jay landed on a really important place. The U.S. Government borrows a lot of money, and it is like -- it is almost certain to want to borrow a lot of money in the near future. So, to do something that would make potential investors and U.S. Treasury get a little nervous seems like a rather foolish thing to do. And Brian put a number on it, like this could be in the order of $50 billion a year and extra interest payments.

So, I think that -- I want to -- I just -- I don't want people to think that because we think we have some -- the fire department has a lot of hoses and they might be able to put out the fire, that it would be a good idea to have the fire in the first place, because I'm sure that nobody on this panel thinks that that's a good idea.

So, with that, let me thank Richard, Jay, Deirdre, and Matthew, and they're going to leave

the scene. And Bill English and Phil Wallach will come on with Brian and me.

While we're changing the set here, Bill English is now a professor in the practice of finance at the Yale School of Management, but he was at the Federal Reserve for 25 years. And from 2010 to 2015, he was the Director of Monetary Affairs at the Fed. That was the key point in which we've done the stress tests on debt ceiling stalemate before.

Phil Wallach, political scientist, is a senior fellow at the American Enterprise Institute now. He was previously once upon a time at Brookings, and he's written over time about what the Treasury options are.

So, Brian, if it's all right with you, let's start with Bill English. And Bill, so take us back -- you have some experience in this. What options does the Fed have if we wake up on October 18 and Janet Yellen announces, I don't have enough cash to pay all the bills?

MR. ENGLISH: So, the first thing that you have to do, I think, is see what she says next, because this issue of prioritization is going to be really important. If she goes for prioritization -- and back in 2011 and 2013, that was at least where it seemed like they were going, though I understand it's not entirely clear and they could change their mind, they could do a variety of things. But if there's prioritization, then the issues, I think, are somewhat easier for the Fed, then a lot of what happens is just kind of following fairly standard procedures except delaying payments other than principal and interest payments.

So, that's a less interesting story, so maybe we should turn to the more interesting story, which is what if they don't decide to prioritize, and they decide instead to just delay everything. And so, we get technical defaults on Treasury securities. And then what we thought back in 2011 and 2013 -- and Brian and I did a much of this work together actually -- is that there are -- you know, there are escalation options for the Fed. There are things that would be fairly natural to do, there are things that are kind of in the middle, and then there are things that would be pretty extreme. And the question is where are the policymakers going to be comfortable with and where will they draw the line?

So, in terms of things that are fairly straightforward, there are kind of things that are already within the current authorizations. And so, you know, the Fed's in the middle of a purchase

program. It would keep purchasing the -- it's rolling over existing holdings. It would keep doing that. It can keep doing securities lending operations, which could be a helpful way of taking -- temporarily taking potentially defaulted securities and providing not-defaulted securities. There are repo operations that the Desk could do in the first instance just to keep the funds rate in the target range. But as was discussed a little while ago, those operations now in some sense are automatic. There's an RRP program. It's in place, it's set up. So, those would help. There's discount window lending that could be done. And the Fed could move into administered rates conceivably if it was having trouble keeping the funds rate in the target range.

I think the key question for these sorts of policies would be what -- at what price do you handle the defaulted securities, and how do you handle them in terms of haircuts and so forth. And I think -- at least our view then was you use prices as determined by the market. The market's probably going to mark down securities that are in technical default or might be at risk of being in technical default. And when you apply the usual haircuts, these aren't actually riskier securities. These are securities that are temporarily messed up because of a political morass, but in the end, that'll get sorted out and the Treasury will pay.

So, that was kind of the first set of actions, then there were kind of intermediate level actions which involved kind of more heavy-handed operations in the repo market. Again, with the standing RRP and RP facilities, I think that in some sense is already there, I guess conceivably you could have to increase the size of the RP program if there was huge demand. And we also get into the issues that Brian raised earlier when he was front-running me about do we have the balance sheet capacity, intermediation capacity in the broker dealer firms to take what the Fed is doing and kind of transfer that to the other market participants.

MR. WESSEL: You think they can taper on November 2 and 3 if this thing is still a live issue then?

MR. ENGLISH: I mean, they could. They have the technical ability to do so. But given the uncertainty that this would create, if we get to early November and this is still an issue, with the debt limit still not raised, I think the -- as people were saying before, there get to be really potentially very

substantial effects on household and business confidence, very substantial effects on spending. And so, the outlook for the economy would look very different if we got to early November and the debt limit still hadn't been raised.

So, I suspect they wouldn't choose to begin tapering, not because it was technically somehow impossible, but because it wouldn't seem right given the change to the economic and the financial situation. Just to finish my --

MR. SACK: When you talk about a set of operations -- yeah, I was going to ask you when you talk about --

MR. ENGLISH: I was going to give the last couple of escalation options. Is that where you want to go?

MR. SACK: Sure. Yeah, that's what I'm going to ask you.

MR. ENGLISH: So, the bottom of our list was the Fed could just go out and do large outright purchases of defaulted treasuries. You could say, you know, we are open to buy defaulted treasuries or, you know, buy treasuries in general but in very large volume and expect that you get a lot of defaulted treasuries coming to you. Or do CUSIP swaps, which is -- which amount to something quite similar where you would be taking a defaulted Treasury and giving the counterparty a not-defaulted Treasury on the other side of the swap. And so, those would be potentially very helpful, if markets were really, you know, operating badly because of the technical defaults.

On the other hand, as we said earlier about the coin, I think this would be seen as taking sides in a political fight, where the Fed really doesn't want to be seen taking sides, because it really would call into question, I think, the Fed's independence over time. But in a desperate circumstance, those are things that you could do.

MR. SACK: Yeah. I think it caused some FOMC members great stress just to read a memo --

MR. ENGLISH: (Laughter) Yes.

MR. SACK: I mean --

MR. ENGLISH: But remember, by the time they got to those meetings, the issues have

been solved. And it was a lot easier to say no, never in that circumstance.

MR. SACK: Yeah.

MR. ENGLISH: And it might have been if they'd actually been looking, as David said earlier, into the abyss.

MR. SACK: Yeah, that's right. But I say that -- I did want to make a point that even if the Fed could do extreme things to solve the situation or to, you know, significantly help the situation, I mean, there are limits to its willingness to step in, I think, into this kind of situation.

MR. ENGLISH: That's right. And just to reiterate a point made earlier, even that wouldn't -- really wouldn't solve the problem, right? You'd still have a lot of macroeconomic issues that you'd be facing and questions about how low risk our Treasury is after all and potentially real increases in borrowing costs going forward it. It would still be a really, really bad outcome for the American taxpayer.

MR. WESSEL: So, you're saying two different things. I mean, I think they're both possible. One is the short-term effects on the economy could be bad if it's -- people freak out and we have a pullback in spending by businesses and households -- that's how you get to a recession. And the other is, we could be for a long time paying the price of this political paralysis.

MR. ENGLISH: Absolutely. And I believe both.

MR. WESSEL: Yeah. So, Phil, what options does the Treasury have? And let's not do science fiction. Let's do the ones that are -- let's start with the ones that are -- you think are most likely to be on Janet Yellen's desk and then to the ones that you'd like to put on Janet Yellen's desk.

MR. WALLACH: Well, thanks for having me. I should note that although I have a treasury direct account myself, I really don't have any inside track into the Treasury. This is just my speculation. But I'd say, you know, one of the best options for the Treasury would be to do something really boring and arcane that nobody has ever asked them about before, in the vein of an extra extraordinary measure, right?

The kind of accounting mechanisms that the Treasury is using right now and today to fund the government's operations is really boring. They have to do with not funding pension obligations today, when they'll fund them whenever this gets sorted out instead. And it doesn't really make for good

sensational articles, and we're pretty used to them by now. But at some point, there was a first time they engaged in these maneuvers. And I would like to think that the Treasury might have some new extraordinary measures that they might resort to, to buy themselves a little extra time.

Janet Yellen's letter to Congress is really a masterpiece of ambiguity. She says that October 18 is the date after which we become kind of uncertain about what's going to happen. It does definitely not say that October 18 is the date that we think we're really going to run out of cash and run into a wall. And it's fair for her to be totally studied in her ambiguity right now. She would like Congress to feel the pressure to get this thing moved out of the way and not have to do any of her tricks up her sleeve.

Now, that said, I think, you know, there are some tricks that folks have put out there before. There are some really interesting articles by Professor Steven Schwartz about how the Treasury could use special purpose entities to issue debt that does not have the full faith and credit of the United States by law, but that the Treasury would more or less represent -- does, in fact, represent a debt that the United States will fulfill, and it could raise money through that and try to stave off a technical default in that way. You know, that starts to feel a little bit trickier than I'm sure they would like to and does make for some good sensational news copy, but might be better than a technical default. And I think --

MR. WESSEL: So, you're saying that if we get to the cliff, and we're looking at the abyss, the Treasury is going to have to decide if they have some possibly novel gimmicks or -- that might even be challenged legally in order to avoid the consequences of not having enough cash --

MR. WALLACE: Right.

MR. WESSEL: -- but that would take the pressure off Congress to do anything, and then you're just by yourself another week of chaos. So I'm not sure of the --

MR. WALLACE: Well, I think that the Treasury could start to communicate pretty strongly to the congressional leaders that we think we're on the brink of financial disaster -- no joking around. This is really going to buy us a few days, but nothing more. And I think -- you know, I am a political scientist. I think it's impossible to separate all this out from the politics at some level, because at the end of the day, what matters so much is what the political leaders want to do once we get to this situation of extremity. If

it's really clear that in fact the political leaders want to -- just want this problem to go away, and that they will make that happen by tomorrow, then I think the kinds of options Treasury needs to consider to avoid a technical default today look a lot different than if they think they're facing a crisis that could last weeks and weeks -- God forbid longer than that.

And, I mean, I do think there are good reasons to believe this time around in 2020, there really isn't a lot of interest among our political leaders in any kind of default. You actually had legislators in 2011 and 2013 who were saying maybe it would be a useful and, you know, a bracing corrective for the United States to have a default. It would really show us that we need to change our profligate ways. Nobody's saying that this time. Both parties have been thoroughly profligate in recent times, and nobody is saying maybe a default might be fun. You know, for all that he's saying, Republicans in the Senate will not help raise the debt limit. Mitch McConnell also has been very consistent in saying the United States will pay its debts. Well, let's say he's wrong, and I like this concept from game theory called trembling hand equilibrium. It's the idea that even if the correct strategy say you should never end up in some place on the game tree, well, maybe you might end up there anyway when somebody screws up.

So, that's the kind of thinking we need to have. And if we end up in this really terrible situation, I think -- then the next phase is -- we still say we'll never default even if we're on the brink of technical default. Even if it's happening, we should say we will never default and make this thing go away as quickly and quietly as we can.

MR. WESSEL: Aren't there likely to be lawsuits if the Treasury pays interest on the debt and doesn't make payments to federal employees, contractors, Social Security people? Aren't we just -- isn't this going to end up in lawsuits if somebody doesn't get it?

MR. WALLACH: Well, everything ends up in lawsuits in the United States, so that's a good bet. But I think it's important to say there are no good or perfectly clear legal options for the Treasury if it comes to this situation. Prioritization is not the law. Republicans tried to pass it into law, and democrats said, no, we don't want that. And so, it is not the law. And if the Treasury decides to do it, it will be sticking its neck out. And there will be people who attack its action as paying China first and paying the rich people first, because that's who holds the bonds after all. And I think it has to be ready for

that if it wants to go to prioritization.

On the other hand, it's also a lot of pay -- to pay the obligations as they come due. It really doesn't have a perfectly legal option in front of it, so it's always going to be a matter of choosing the least evil path available to it.

MR. WESSEL: So Brian and Bill, someone asked a good question online, which is, "So, does the Fed try and postpone the inevitable by buying time and being aggressive? Or does it say, look, this is a political issue that the Congress should fix, and we're just not going to rush to repair this thing. You guys figure it out. I mean, that's not very well phrased, but you get my gist. Do they try and protect the economy and the markets from the craziness of Congress? Or do they let the pressure amount on Congress to do something?"

MR. ENGLISH: So, I'll take a first pass, and then Brian can participate. But I think the answer has to be, in some sense, you have your mandate and you want to try to achieve your mandate. And so, if you think that you can do things with tools that you're comfortable with that will improve the situation, then you do that. And so if you can, you know, support market functioning and so on, and therefore, improve the outlook for the economy and make it more likely get to maximum employment, stable prices, and so on, then I think you do that.

I think that the constraint is not that you're afraid that you're setting up bad incentives for Congress. The Fed doesn't want to try to be telling Congress what to do and threatening Congress, all right, we're going to do a bad job if you don't do what we think you should do. But there are limits to what the policymakers are comfortable with. They don't want to be seen as political. They don't want to be seen as taking sides. And I think that was where in the escalation options that were discussed long ago now, after a while, people just got uncomfortable. They said that's further than I'm willing to go, that's more than I want to do, because I feel like at that point, we really are undermining our independence. And that in the long run is worth a whole lot. I don't know, Brian, if you have other thoughts.

MR. SACK: No, I agree. I mean, I think that was clear. They're not going to go, you know, in a very, you know, unlimited way to solve this problem. Now, you know, their regular operations, I do intersect with it in some ways. I mean, the fact that we target a short-term, relatively risk-free rate, and

there's actually facilities that control repo rates -- I mean, that, like, puts you in the business of affecting treasuries and, you know, in some ways responding to this. But I think the response will all be in that context in a set of, you know, operations and approaches that are, you know, already established and related to their mandate.

And if the economy weakens sharply, yes -- you know, maybe they won't taper, maybe they'll push out tightening. But again, that would be their regular response to anything that we can -- the outlook at this point. So, they will do that, but they won't take the extraordinary steps to really just address the market problems that this would create.

MR. WESSEL: Somebody asked Phil if -- I know you're not a lawyer, but is there a 14th Amendment route out of possible default? I think the 14th Amendment says the faith and credit of the United States shall not be questioned.

I mean, my reaction here is that people are looking for some magic bullet, the trillion-dollar coin, the 14th Amendment, something that will allow the Executive Branch to tell Congress how the debt limit doesn't matter. But actually it doesn't seem to be practical, that -- or maybe even legal, that --

MR. WALLACH: Right.

MR. WESSEL: -- Congress has taken this on itself for decades. And if Congress can't do it, it's very hard for the Executive or for the Fed to say, oh, never mind, we don't need Congress. Do you agree?

MR. WALLACH: Well, I mean, the Constitution is very clear that it's Congress's responsibility to pay the debts -- that's right there in Article 1. And, you know, that part of the 14th Amendment was designed to make it so Congress could not shirk on civil war debts. If southerners got strong in Congress, they couldn't make that move -- that's what it was there for. It obviously does not mean that we can't have a debt limit, or that Congress really isn't allowed to control the way that we manage our debt. Congress is supposed to do that. That's its job.

So, I mean, once you get into these different options -- again, you're talking about what's going to cause the least mischief. And to me, I think any option which basically amounts to Treasury saying, and we now have the tools to never pay any attention to the debt limit ever again. I think those

are very bad options, because they seem maximally antagonistic to Congress and most likely to create a constitutional crisis, which would be plenty economically destabilizing, I'm sure.

And so to my mind, you know, the Obama administration was very clear that it was not interested in declaring some kind of 14th Amendment Trump card, and I wouldn't think that the current administration would be interested in that either.

MR. WESSEL: So Brian, what have we left untouched here?

MR. SACK: I mean, I think the bottom line is there's no good set of options. We get to the date, if it's unresolved -- you know, if there were extra extraordinary steps that would buy Treasury a few more days -- we don't know if there are. If there were, those seem problematic because they simply delay the problem and actually make it worse, because then when those few days go by, everyone's going to say, well, they must have something else up their sleeve. There seems to be no legal option to get around it.

And so, I think it comes down to do they actually decide to prioritize. And as we talked about before -- I mean, that decision has to take place the night before, and if they're not going to prioritize, it puts in motion a string of messy operational issues that are going to almost certainly lead to market pressures and market stress.

MR. WESSEL: Right. And prioritization is hardly a painless solution. What that means is they pay the bondholders, but they have to cut everything else. I think Louise and Wendy estimated 40 percent less on all the other things that haven't been paid. So, that will have pretty severe consequences on public trust and the economy itself.

MR. SACK: And I think it's problematic in two ways. I mean, one is that it has a direct macro effect, which you're talking about. And the other is it's just a very uncomfortable situation where, you know, the perceived odds of actually having to miss a debt payment are going to be much higher than otherwise.

MR. WESSEL: Yeah. Okay. Well, I think we'll leave it there. I want to thank Bill and Phil for helping us in this part of the program, and thank Jay Barry, Richard Chambers, Deirdre Dunn, Matt Hornbach for joining us earlier. And I want to thank Brian for helping us organize this in the first

place.

I think what we were trying to accomplish here, we have, which is to say there's a lot of uncertainty. We hope we don't actually run the stress test on the system. But at least now I think we have put on the table some of the places where we could see issues as best we can tell from this vantage point of doing something unprecedented.

You know, I often think that we overuse the word, we live in extraordinary times, because all times seem extraordinary. But I guess I'm getting old enough to think that this time really is extraordinary in the amount of political polarization on raising the debt limit at a time when we have borrowed so much money. A number of people made the observation that the Treasury market is a lot bigger than it was a decade ago. This just seems to me extraordinary.

So, I had hoped that we would cancel this event because Congress would have done, but I think everybody who participated in this thinks they should do is raise the debt ceiling, but they haven't. And all I can say is I hope we don't have to assemble this group again to examine the damage that's been done if we do go over the cliff.

So, thank you all for watching. And this will be archived on our website. You can watch it again and again and again if you want to get ready for financial calamity. So, with that, thank you all very much.

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