

**Conference Call of the Federal Open Market Committee on
October 4, 2019**

A conference call of the Federal Open Market Committee was held on Wednesday, October 4, 2019, at 9:15 a.m.

PRESENT:

Jerome H. Powell, Chair
John C. Williams, Vice Chair
Michelle W. Bowman
Lael Brainard
James Bullard
Richard H. Clarida
Charles L. Evans
Esther L. George
Randal K. Quarles
Eric Rosengren

Patrick Harker, Robert S. Kaplan, Neel Kashkari, and Loretta J. Mester, Alternate Members of the Federal Open Market Committee

Thomas I. Barkin, Raphael W. Bostic, and Mary C. Daly, Presidents of the Federal Reserve Banks of Richmond, Atlanta, and San Francisco, respectively

James A. Clouse, Secretary
David W. Skidmore, Assistant Secretary
Michelle A. Smith, Assistant Secretary
Mark E. Van Der Weide, General Counsel
Steven B. Kamin, Economist
Thomas Laubach, Economist
Stacey Tevlin, Economist

Christopher J. Waller, Jonathan L. Willis, and Beth Anne Wilson, Associate Economists

Lorie K. Logan, Manager pro tem, System Open Market Account

Ann E. Misback, Secretary, Office of the Secretary, Board of Governors

Matthew J. Eichner, Director, Division of Reserve Bank Operations and Payment Systems, Board of Governors; Michael S. Gibson, Director, Division of Supervision and Regulation, Board of Governors; Andreas Lehnert, Director, Division of Financial Stability, Board of Governors

Daniel M. Covitz, Deputy Director, Division of Research and Statistics, Board of Governors; Michael T. Kiley, Deputy Director, Division of Financial Stability, Board of Governors; Trevor A. Reeve, Deputy Director, Division of Monetary Affairs, Board of Governors

Jon Faust, Senior Special Adviser to the Chair, Office of Board Members, Board of Governors

Brian M. Doyle, Wendy E. Dunn, Joseph W. Gruber, Ellen E. Meade, and Ivan Vidangos, Special Advisers to the Board, Office of Board Members, Board of Governors

Linda Robertson, Assistant to the Board, Office of Board Members, Board of Governors

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Patrick E. McCabe, Deputy Associate Director, Division of Research and Statistics, Board of Governors; Jeffrey D. Walker, Deputy Associate Director, Division of Reserve Bank Operations and Payment Systems, Board of Governors

Dana L. Burnett, Section Chief, Division of Monetary Affairs, Board of Governors

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Kartik B. Athreya, Michael Dotsey, Anna Paulson, Glenn D. Rudebusch, Ellis W. Tallman, and Geoffrey Tootell, Executive Vice Presidents, Federal Reserve Banks of Richmond, Philadelphia, Chicago, San Francisco, Cleveland, and Boston, respectively

David Andolfatto, Evan F. Koenig, Paolo Pesenti, Julie Remache, Paula Tkac, Mark L.J. Wright, and Nathaniel Wuerffel, Senior Vice Presidents, Federal Reserve Banks of St. Louis, Dallas, New York, New York, Atlanta, Minneapolis, and New York, respectively

Patricia Zobel, Vice President, Federal Reserve Bank of New York

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CHAIR POWELL. Good morning—or afternoon—everyone. Thanks for joining the videoconference today on such short notice. I know that a number of us had to change plans to participate, and I appreciate that. I also want to thank the staff for going, really, all out since the previous meeting to bring us to this point today, when we can begin to consider a plan to get through near-term issues and from there to a stable longer-run equilibrium. We're here to discuss the recent pressures in money markets, the steps we've taken so far to address those pressures, and the path forward. The matter is time sensitive, hence the need to meet today rather than wait for the next scheduled meeting at the end of October.

As I noted in my email to you earlier this week, we do not need to reach any formal decisions at this meeting. However, as you will see from the briefings, we will need to reach consensus soon on a reasonable near-term plan and an associated communications strategy. Nonetheless, there will be sufficient opportunity to weigh the options, express our views, and work expeditiously to reach consensus. After the briefings, we will have a Q&A round, an opportunity to comment, and then an open discussion.

As you all know, the story is a complicated one, and there are many causal factors at work. So our plan will need to involve both measures to relieve pressures that are set to intensify in the near term as well as potential measures that improve liquidity conditions over time, but that will take months of careful consideration before they can be decided on and implemented.

Our main focus here today needs to be on the former: measures to get us through the end of the year and through the April tax payment season, as we'll discuss. If we can agree on the broad outlines of our approach at this meeting, I will ask the staff to develop specific plans and communications for us to review. One option is that we would discuss, revise, and vote at a

meeting next week or do so through electronic distributions and commenting and a notation vote.

The other obvious option would be to wait until the October 29–30 meeting to make decisions.

That is three and a half weeks away. There are concerns that waiting that long runs the risk of being “behind the curve,” because markets have already figured this out by now.

So that’s the plan for the meeting. If there are no questions on that, then what we’ll do is go ahead and move to the briefings from Patricia, Lorie, and Thomas. Patricia, would you like to begin?

MS. ZOBEL.¹ Thank you, Mr. Chair. Since the decision in January 2019 to remain in an ample-reserves regime, the Committee has communicated that it is on a path toward the most efficient and effective level of reserves for that regime. This initially involved relatively rapid reductions in reserves through asset redemptions and growth in nonreserve liabilities. In March, the Committee tapered asset redemptions, slowing the pace of reserve decline, and in July, the Committee ended redemptions entirely.

Recent developments suggest that it may be appropriate for the FOMC to consider next steps in the process of transitioning to the efficient and effective level of reserves. I’ll start with a review of what we learned in September and the effects of our operations on market conditions. Then, I’ll discuss the outlook for the remainder of the year and what market participants are expecting. Lorie will review some key tradeoffs bearing on options that the FOMC may consider to maintain reserve levels and provide greater assurances of interest rate control, particularly around year-end.

I’ll refer to exhibit 1. As shown in panel 1, overnight money market rates rose sharply the week of September 16, with contacts reporting poor liquidity and elevated uncertainty about funding market conditions. These developments also had spillover effects, with commercial paper rates and dollar borrowing costs in FX swaps rising notably. Treasury securities market liquidity in off-the-run securities deteriorated, and the Treasury cash-futures basis widened.

While there had been some upward pressure in money markets on previous corporate tax payment dates, the magnitude of the moves in September was surprising. The staff analysis and market commentary has pointed to a confluence of factors related to the mid-September tax payment date and Treasury settlement. First, money fund lending in repo markets, which had been declining before mid-September, dropped sharply the week of September 16 as shown by the decline in sponsored lending volumes in the centrally cleared repo market in panel 2. The reduction in money fund repo lending resulted in a widening of the distribution of

¹ The materials used by Ms. Zobel and Logan are appended to this transcript (appendix 1).

rates across repo market segments. This dispersion became highly elevated on September 17, most notably in the interdealer market, as shown in the dark red bars in panel 3. Dealers and leveraged accounts in this segment have fewer alternative sources of funding and were willing to pay substantially higher rates in order to finance positions.

Second, pressures in secured markets spilled over into unsecured markets and lenders pulled back from federal funds and Eurodollars out of caution about potential outflows related to tax payments or to lend at higher rates in repo. As shown in panel 4, FBOs and small domestic banks experienced notable outflows, while U.S. G-SIBs retained reserve balances. These larger institutions held reserves well above their lowest comfortable levels of reserves, but didn't increase lending in repo or in federal funds in response to higher rates. Other banks that were close to their lowest comfortable levels of reserves paid significantly higher rates in unsecured markets to defend their reserve positions. As shown in panel 5, over September 16 and 17, 70 percent of federal funds volume consisted of SFOS panel banks whose reserve balances had fallen near or below their lowest comfortable level of reserves.

Funding markets in the past have been able to absorb similarly sized shocks associated with tax and Treasury settlement dates. However, one lesson from this experience may be that, against the backdrop of elevated Treasury debt issuance and declining reserves, smaller shocks can have more pronounced effects on markets. Internal risk limits and balance sheet costs seem to play a role in slowing the distribution of liquidity across the system and amplifying the shock, as financial institutions require high spreads to intermediate. A second lesson is that a higher level of reserves may be needed to accommodate distributional frictions in reserve markets. Some banks have elevated demand for reserves on days of high expected outflows, and even those that have surplus reserves may choose not to lend to other firms even at higher rates.

In order to help maintain the federal funds rate within the target range, the Desk conducted large-scale repo operations starting on September 17. These played an important role in calming markets and improving funding market conditions. The addition of term operations helped provide assurances to market participants about funding markets over quarter-end. And at its peak, participation in the Desk's overnight and term operations added \$203 billion of reserves, as shown in panel 6. With these operations, September quarter-end conditions were stable, although rates were still somewhat elevated relative to recent quarter-end dates. Some of the higher repo rates passed through to the federal funds market, and the distribution of rates traded in federal funds was wider than normal.

In looking ahead, market participants have expressed uncertainty about how funding market conditions may evolve after the currently announced open market operations (OMOs) roll off. As shown in the table in the Appendix, the Desk's three term operations will mature by October 11, and the overnight operations will also expire. Market participants are also concerned about funding market conditions

around year-end, particularly in light of more acute balance sheet constraints and anticipated sizable declines in reserve balances at the end of the year.

Forward measures of money market rates through year-end indicate expectations that pressures may build between now and December. Term repo rates remain somewhat elevated relative to overnight index swaps, and indicative pricing in repo markets for the year-end has been between 3 and 4 percent.

Nearly all money market analysts expect permanent open market operations to be announced at the October meeting. Several of these analysts have indicated initial purchases are likely to be larger than purchases needed to offset organic growth in nonreserve liabilities in order to maintain reserves at current or higher levels. Analysts expect the size of these purchases to be around \$225 billion, though estimates range from below \$200 billion to as high as \$400 billion. Expectations are split as to whether these purchases would be concentrated in Treasury bills, short coupon securities, or across the curve. I'll turn it over to Lorie to discuss options the FOMC may consider.

MS. LOGAN. Thank you, Patricia. I'll be referring to exhibit 2. As Patricia noted, recent developments suggest that it's appropriate to consider next steps in the transition process to the most efficient and effective level of reserves. In the near term, one step the Committee could consider is directing the Desk to maintain reserve levels similar to the average level in early September. This would entail operations to maintain the reserves created through recent operations and offset future growth of nonreserve liabilities. Second, the Desk could execute overnight repo operations each day through year-end to provide a shock absorber to support control of the federal funds rate in addition to maintaining reserves similar to the early September average. These two steps could provide more assurance of rate control as the Committee considers longer-run strategies to maintain an ample-reserves regime, which might include considerations relevant to reducing reserve demand or the establishment of a standing repo facility. My briefing today centers on how to reduce the risk of volatility in funding markets over the near term while providing time for the Committee to consider these longer-term issues.

If the Committee wishes to maintain reserve levels close to, or moderately above, those that prevailed in early September, a fairly sizable amount of open market operations would be required. The actions taken by the Desk to address pressures in money markets over the second half of September lifted reserve levels by around \$100 billion on average during the latter half of the month to just above \$1.4 trillion. Absent further open market operations, reserves will decline significantly over coming months. The staff estimate that the SOMA would likely need to increase by at least \$250 billion by the end of 2019 and by more than \$350 billion to maintain a similar level of reserves through April of next year. Our current forecast of reserves is shown in grey in panel 7.

In the memo, two illustrative scenarios using both Treasury bill purchases and term repos are presented to maintain reserve levels around \$1.45 trillion, the average

level that prevailed in early September. Although Treasury bill purchases and repos would add reserves, they are not perfect substitutes, and both have some limitations. The tradeoffs essential for choices about the pace and mix of open market operations relate to communications and the capacity of the market to smoothly absorb these operations.

In the first scenario shown in panel 7, Treasury securities are purchased in the secondary market at a faster pace. This quicker pace of purchases means there is somewhat less reliance on repo operations to add reserves, which might improve the intermediation of reserves by relying less on primary dealers that may face balance constraints to do repo, particularly around year-end. The advantage of relying more heavily on outright purchases is that the Treasury market is deep and liquid, and can absorb a fairly high volume of transactions. Outright purchases also lay a permanent base of reserves, which can reduce the size of operations needed to maintain reserve levels in the future. In panel 7, we assumed purchases of Treasury bills of around \$60 billion per month, which could make a significant contribution toward filling the reserve need by year-end. We will learn more about the capacity of the Treasury market to absorb our operations through experience and could find that we are comfortably able to purchase more than this amount or possibly somewhat less. I should note that the addition of a broader “universe” of Treasury securities, such as those notes and bonds having only a few years to maturity, would likely add to the capacity.

Now, Treasury security purchases do have some drawbacks. Large purchases of Treasury securities might have some chance of being conflated with quantitative easing, particularly by a broader audience that is less familiar with the Federal Reserve’s balance sheet. Purchasing Treasury bills may reduce this association, because they are money market instruments with limited duration and doing so would not materially change the quantity of duration in the private sector’s hands or the total term premium effect of the SOMA portfolio, all else being equal. However, to the broader public, this distinction might not be apparent.

The second scenario, shown in panel 8, relies more heavily on repo market operations to achieve the desired level of reserves. Repo operations have been successful at restoring calm in money markets in recent weeks, as Patricia discussed. As such, repo would be an important component of any plan. However, there are important limitations of repo operations, particularly around year-end. Operating in the repo market depends heavily on primary dealer balance sheet capacity and willingness to intermediate to the broader market. As dealers manage their balance sheets closely into year-end, they may have less capacity to take up large amounts of term repo and lend this onward because of these constraints. As shown in panel 8, a greater reliance on term operations may make it somewhat more difficult to achieve the reserve level objective. In this scenario, we use the September quarter-end experience as a guide to how much term repo can be sustained. Overnight repo operations could supplement these term operations, of course, but as a backstop to rates. We cannot estimate with assurance how much overnight take-up we might see, so they’re not shown in the panel.

There are also intermediate plans that could balance the tradeoffs involved in the two scenarios shown in panels 7 and 8. For example, another approach, not shown, could be for the Desk to purchase fewer outright securities initially in order to smooth the communications, and then purchase higher levels of securities heading into year-end. Higher levels of purchases in December may be more easily explained as associated with the year-end downdraft in reserves and balance sheet constraints. In any approach, it may take some time to maintain reserves near or above the levels that prevailed in early September. Faster purchases or higher repo take-up could help achieve the objective sooner, but it may still take some time.

As the Desk works toward maintaining reserve levels, particularly around year-end, it seems appropriate to maintain overnight repo operations in order to provide a cushion against rate volatility that might occur and to enhance market participants' confidence. The Desk would expect to offer \$75 billion in overnight repos, with a minimum bid rate to IOER. However, the parameters of these operations could be adjusted if conditions warrant. For example, the minimum bid rate could be adjusted higher if take-up in the operations warranted and bid rates were settling near the minimum bid rate. Alternatively, if higher pressures were expected, the offering size could be increased and the minimum bid rate lowered.

Before concluding, I want to make one near-term note on the current repo operations. After further consideration, we made one adjustment to the planned repo operations in the draft Desk statement we circulated to the Committee in advance of this meeting. To maintain continuity with the current amount of outstanding term repo and based upon feedback from counterparties, we will modestly increase the offering sizes of the term operations through November 4. This Desk statement outlining the continuation of overnight and term operations is slated for release after today's meeting. These operations are consistent with the domestic policy directive to the Desk that the Committee adopted at its previous meeting and do not require Committee action at this meeting. I'll now turn it over to Thomas, who will discuss related communications issues.

MR. LAUBACH.² Thank you, Lorie. I will be referring to the handout "Material for the Briefing on Communications Considerations regarding Plans for Open Market Operations." If the Committee were to agree on a plan for the growth of its Treasury securities holdings as well as repo operations over the rest of this year and into next, it may wish to issue a statement to communicate this decision to the public. Depending on the timing of your decision, you could issue this statement following your regularly scheduled October meeting or well before then. Even in the former case, you may want to issue this statement separately from your regular postmeeting statement to emphasize that these balance sheet decisions are distinct from the choice of the policy stance.

Regarding the timing of this statement, as Lorie highlighted, announcing your decisions before the October meeting would provide more time for Treasury security

² The materials used by Mr. Laubach are appended to this transcript (appendix 2).

purchases ahead of the projected decline in reserves toward year-end and might reduce the risk of market expectations from becoming misaligned with your intentions. That said, the Committee hasn't announced an intermeeting action since May 2010, and as of earlier this week most market participants didn't seem to expect an announcement about reserve maintenance purchases before October 30.

Turning to the possible content of such a statement: You could highlight the continuity and consistency of your decision with previous communications by referring to your January 2019 decision that you intend to maintain an ample supply of reserves so that control over the federal funds rate and other short-term interest rates is exercised primarily through the setting of administered rates. One important consideration in formulating such a statement is how you would describe the level of reserves you wish to maintain over time. The options that Lorie presented are predicated on the view that, in light of the experience of recent weeks, it is prudent to maintain a level of reserves at or moderately above those prevailing in early September, before the sharp decline around the middle of the month. Communicating this intention would provide assurance to market participants that your operations will be sufficiently large to prevent reserves from running much below \$1.5 trillion.

Another consideration is how specific to be about the mix and size of outright purchases and of term and overnight repo operations. One approach would be to state that you will be conducting outright purchases and term repo operations as necessary to achieve and maintain your desired level of reserves, and that, in addition, you will continue to offer overnight repo operations to lower the risk of money market pressures that could adversely affect the implementation of monetary policy. Specific amounts for the pace of outright purchases and the size and other terms of term and overnight repo operations could then be announced by the Desk and adjusted over time if needed. More generally, in light of the uncertainty surrounding the level of reserves most consistent with efficient and effective implementation, it might well be prudent to emphasize that you will continue to monitor money market developments as you assess what that level is, and that you stand ready to adjust the details of these plans as necessary.

Thank you, Mr. Chair. That completes our prepared remarks, and we'll be happy to answer questions.

CHAIR POWELL. Okay. Thanks, everyone. If you're on camera, you could raise your hand, and Jim will take down names. We have some who are just calling in. So while we're doing that, this is the time for questions for the briefers. I'll ask folks who are just calling in on the phone and not here by camera, including—why don't we start with you, Esther, if you have any questions.

MS. GEORGE. Yes, I have one question. Do you want me to ask it now or wait?

CHAIR POWELL. Yes, please. Go ahead. We'll doing questions and answers, and then we'll have an opportunity for comment.

MS. GEORGE. Right. So, Lorie, my question, when you talk about under either options that it could take some time to reach the desired level, do you have an estimate? How do you think about what that time frame is?

MS. LOGAN. So the time frame that we show in the two illustrative examples, using a combination of the two tools we discussed—the term repos and the purchases—would take about a month to reach those levels. But, again, these are just illustrative, and they depend importantly on the date at which the purchases or the term repos would begin, as well as the overall size. And so that time can be shortened or lengthened, depending on the tradeoffs that the Committee discusses today regarding the two tools.

MS. GEORGE. Okay. But it sounds like you're talking about a matter of weeks. We wouldn't be thinking about that in the context of an extended period.

MS. LOGAN. As in the illustrative examples we've shown, yes, I think at the beginning it's weeks, but I would note that, in the second illustrative example as well as the top, there are other periods over the course of these three months when the combination of those two tools still leaves reserves a little bit short of that objective.

Now, it's important to note that the overnight repos would also be available, and so they're not shown on these charts because we don't know for sure what the take-up would be. But, you know, we could expect that those reserve levels will probably be above those in later parts of the forecast, but we can't be certain.

MS. GEORGE. All right. Thank you. That's all I had, Mr. Chairman.

CHAIR POWELL. Okay, thank you. Governor Quarles, do you have anything? Questions? Just questions at this point.

MR. QUARLES. Yes. Just one question, with respect to clarification. So I think I understood from the briefing that a significant problem in continuing with *ad hoc* operations until we could make, perhaps, more permanent changes that may be affecting incentives for the market but as a way of addressing the current shortfall, I think I understood that that had to do with the capacity of the balance sheets of the counterparties as to why we thought those *ad hoc* operations might be—that that might be an unsustainable way to proceed. So am I correct about that as to that being a problem, or are there problems, as well as the length of time we might be doing that, that could be perceived as undermining our commitment to an ample-reserves regime?

And then I have a question—that is, if the former is the case, one of the things that has been thought about for the longer term—and although we’re talking about the shorter term today, I just wanted to make sure that I understand this as well, because it does affect a little bit how I think what we ought to do in the shorter term. For the longer term, is that an element of—a longer-term response could be the implementation of a kind of a standing repo facility, which I had understood would be kind of an Eddie Murphy–Dan Aykroyd in *Trading Places*—you know, “Bring ’em on. We’ll take them all.” And is that the case? And if that’s the case as to what the repo facility would be, how does it work that’s different from these *ad hoc* operations, which might be limited by the capacity of the counterparties? That’s it.

MS. LOGAN. Okay, thank you. So, in terms of the temporary repo market operations, I think you raised two important points. One of the limitations of the temporary open market operations that we discussed is related to the balance sheet constraints that you were talking

about. For the counterparties that we have in the way that we conduct the repo operations today, if they are going to intermediate—so, if they're going to take the operation from us and then lend on to other market participants—that does gross up their balance sheet. And particularly as we're moving into your end, we've heard from them already that they would be unlikely to do that sort of intermediation that they started to do in these early days of September. Now, they would do some of it, but probably not to the degree that they have been doing it. So we do see this intermediation and balance sheet constraint as a key limitation of the temporary open market operations.

I think the second point you raised about the commitment—you know, I do think that market participants have a view that purchases are more in line with the ample-reserves regime in terms of the permanent base of reserves that would be maintained. But that's not a theme that we've been hearing a lot about right now, for the short term.

I would say the other consideration and limitation of using temporary open market operations, as opposed to purchases, is that, as you can see in the forecast, sometimes the increase in nonreserve liabilities and, therefore, the drop in reserves can be quite large and very swift. And if you use permanent purchases to get ahead of that so that there's a buffer, then we're more likely to be able to maintain that minimum level of reserves. If you rely just on the temporary open market operations to fill that gap in those periods that you can see in gray, one, we might not have the capacity, and, two, it's a very sudden shift in the Federal Reserve's operations with the private sector to try to fill that large of a hole in that short amount of time.

So, I would say, there are three types of constraints we're talking about with the temporary open market operations: one, the balance sheet limitations; two, the commitment to the ample-reserves regime, though I don't think that's been in play in the short run; and then,

three, the size of the change in nonreserve liabilities that would be difficult to use that temporary tool to fill that full amount of the hole.

CHAIR POWELL. Okay, thank you. President Kaplan—and I'll ask people in the room as well—any questions before we begin the opportunity for comment?

MR. KAPLAN. Yes. The only question is for Lorie, and I think I know your view on this—I assume you would assert that the “faster” approach versus the “slower” approach gives you greater confidence that we would meet the objective of returning to the early September reserves target and put us in the best position to deal with year-end demands, that the faster approach would give you more confidence we'll achieve those objectives than the slower approach?

MS. LOGAN. From a purely operational perspective, as we noted in the memo, I think the first illustrative example would, of course, give us more confidence of being able to maintain that level of reserves. But also as discussed in the memos, there are important tradeoffs that the Committee would need to make, related to communications and whether the broader public might interpret those larger purchases at the beginning as potential quantitative easing (QE). And I think that's a broader tradeoff for the Committee to consider. But from a purely operational perspective, the first illustrative example would give us more confidence.

MR. KAPLAN. Yes, that was my question. Okay, thank you. I appreciate that.

CHAIR POWELL. Thank you. Governor Brainard.

MS. BRAINARD. Yes. I may be wrong, but I think Governor Quarles also asked you about the temporary versus the standing repo facility and how to think about that, and I thought that was an important question. Lorie, I don't know if you want to come back in on that.

MS. LOGAN. Thank you. So in terms of the standing repo facility, I think we have learned some lessons that might be important in the discussion the Committee will have in October on the idea of a standing repo facility. First, I think we have learned that the repo operations generally are effective. They have brought down rates, and they have calmed markets through the use of a repo-type operation. This wasn't a standing facility but had some similar features that, I think, would be effective.

We have also learned, though, that there is not perfect pass-through from the type of counterparties that we have. Currently, we rely on primary dealers involved in that, those repo operations. And as we discussed in answer to the question from Governor Quarles, those dealer balance sheets are not fully elastic, and so the pass-through and intermediation is not very smooth. There are some frictions there. For example, the dealers that are coming into our operations and then on-lending are charging quite a bit of a spread to those who don't have access to the operations.

The other thing I think we have learned through this process—not specific to the open market operations, but to the money market conditions more broadly—is that we did see that 15 banks did borrow in federal funds or unsecured markets at rates above the discount rate. So, you know, there is stigma associated with the discount window that we can evidently see. And I think it would be important, when designing a standing repo facility, to consider what type of restrictions or communications surround it, so that that type of stigma wouldn't also apply to this facility.

So I think issues regarding the counterparties that would be appropriate for a permanent standing repo facility would be an important discussion in October—the appropriate rates as well

as the communications around it. And I think the lessons we've learned so far would apply to each of those categories.

CHAIR POWELL. Okay, thank you. No one so far has visibly raised his or her hand. Oh, there's someone. Is that—President Evans.

MR. EVANS. Thank you, Mr. Chair. I have a couple of questions. I guess the first one starts from the options for communications, the second bullet, which highlights that we can “highlight continuity with our January 2019 decision to maintain an ample supply of reserves so that control over the federal funds rate and other short-term interest rates is exercised primarily through the setting of administered rates.”

That got my attention, because I know that we have talked about administered rates being the focal point for how we establish the federal funds rate within our target range. But, you know, it seems that's highly dependent on the level of reserves that we have, because as we have had to move the interest rate on excess reserves (IOER) lower into the target range, the funds rate is trading above that, and the IOER rate and the overnight reverse repurchase (ON RRP) rate are lower than that. And it seems that it's more money market arbitrage that is determining the funds rate. If we really wanted—so I'm a little concerned about highlighting administered rates there. That's one part of the question.

But the other one would be, it seems quite related to the size of reserves. If we had greater levels of reserves so that it is the arbitrage for the administered rates, then it could be consistent with this point. Is there some relationship between the level of reserves and the emphasis on administered rates? I mean, that's a combination of questions maybe for Thomas and the Desk.

MR. LAUBACH. I can take one first run, and Lorie has to bail me out. [Laughter] So the way that I would interpret the language that you adopted in January is that you want to ensure that the federal funds rate is trading reliably within the target range. I don't necessarily see a strict relationship there between the level of the federal funds rate and the level of the administered rates. So if you have a mechanism by which you set the administered rates and the federal funds rate—for example, trades above the administered rates—but you have firm control of the federal funds rate within the target range, that would seem to me to be one version that is consistent with what you expressed, because, basically, it is, as you move the administered rates, the federal funds rate is really closely tied to them.

In contrast—right?—if you had, for example, a situation in which you have signs of reserve scarcity, then you have high-frequency fluctuations in factors affecting reserve supply, like the things we have seen with tax dates, *et cetera*. And then what you might see is that, actually, the link between your administered rates and the federal funds rate becomes a lot more volatile. And so that might be the situation that I would interpret your statement as indicating you wanted to avoid. Lorie or Patricia, I don't know if you have thoughts.

MS. ZOBEL. Thank you, Thomas. I think that all sounds right. I think the only thing that we would add is that, over the course of this year, we have seen a relationship emerging, as you noted, between changes in the reserves supply and changes in the federal funds rate. And so, at higher reserve levels, maybe last March, we saw a lower degree of that relationship—and rates that were more centered and more stable above the IOER rate. And there was less dispersion in the federal funds and Eurodollar markets than we saw over the course of the summer and, most certainly, more recently. I think we saw a little bit of that relationship emerging, and then, most

recently, we saw it turn more volatile. So I think the relationship between reserves and that kind of behavior is pretty well established—so, higher levels would be more stable.

MR. EVANS. Okay, all right. If I could ask a second question—the communications memo points to us talking about early September levels of reserves—the documents are prepared. So I guess my question is, early September size of reserve balances—that’s a focal point.

I’m trying to be careful here. I’m not asking anybody for what they think of as the optimal size of reserves or anything, but it seemed to be a focal point from a time when things were working a little bit better.

In preparation, I went back and thought a little bit about some other levels of reserves that have been mentioned. So back in December 2018, at the FOMC meeting, there was a presentation. And it was just mentioned that the level of reserves at that time, if we had sort of stopped reducing the runoff, would have been \$1.74 trillion, and we shouldn’t have any difficulties with how money markets are functioning. That’s well north of where we are, so I guess that’s not so surprising.

The early September number is about \$1.45 trillion. But in March 2019, we had a presentation in which we talked about the Senior Financial Officer Survey estimates of comfortable levels of reserves and aggregated those—a little under \$900 billion, I thought, was what they were pointing to. There were uncertainties associated with those estimated, a couple of buffers were added on top of that, and I think we got to what was supposed to be a pretty comfortable level of reserves—\$1.1 trillion—or maybe it was \$1.2 trillion, but it’s pretty far south from where we are. And that was our best thinking at the time. This is evolving, we’re learning about the markets, and so, you know, there’s good reason to think that that was a good

number. But I think that very high confidence was put on that being a good number, and now we've been pointing to something less. So, early September—this is just a focal point—we think market functioning should be pretty good if we were going to go that route. I'm just trying to figure out these other kinds of levels.

MS. LOGAN. As we discussed in the memo, the focus that we took was to return reserve levels to early September, but also to combine that with the use of overnight RPs as a backstop. And we think that combination over these next three months will reduce volatility in money markets. And, more importantly, it will provide time for the Committee, I think, to make longer-term assessments—like the ones you're raising, President Evans—about what the appropriate efficient and effective level of reserves is.

I think, importantly, over that time, we can go back to some of those historical experiences and do more analysis about the type of relationships that Patricia was talking about. And we can think more deeply about the shape of the aggregate reserves demand curve and the type of distributional frictions that we saw. And it also gives the Committee time to think about some longer-run strategies about a standing repo facility or changes in other nonreserve liabilities or overall incentives to affect the demand for reserves.

So our focus, really, here in the memo was on the next three months. And in the context of the next three months, I think that returning to that level is what is feasible in combination with the overnight RP and will give the Committee time to discuss these issues in more detail.

MR. EVANS. Okay. Thanks very much.

MR. LAUBACH. President Evans, if I might just add, from the perspective of communications, you may, therefore, also want to emphasize that this number or the level that

you are going to refer to in your communications is not necessarily fixed for all times. But it is something that you will continue to assess.

CHAIR POWELL. Thank you. President Kashkari.

MR. KASHKARI. Thank you, Mr. Chair. I guess my first question is for Lorie, which piggybacks on Charlie's question. I just want to make sure that I'm understanding the very basics of this. If I look at the forecast, if we do what you're proposing but we don't do anything else, in April you would expect to see rates spike again. Is that fair to say? So we're buying ourselves four or five months, something like that?

MS. LOGAN. That's right. If you look at panel 7, as I just mentioned, the focus of the memo and the work is on the next three months.

MR. KASHKARI. Yes.

MS. LOGAN. And during that time the Committee would have more time to discuss the appropriate approach to think about the first quarter of 2020. We wanted to show, though, this longer horizon in the forecast so that you could get a sense of how the decisions being made in the short run would affect that second quarter and into the April period.

MR. KASHKARI. Okay, thank you. So a quick follow-up to that. In previous meetings, I thought the staff was being too conservative in your "buffers on top of your buffers." Pretty clearly, I was wrong about that. I guess my question here is, if we're going to do something somewhat extraordinary, do we want now to build in more of a buffer and just make sure that we don't have any hiccups or surprises, between now and April? And so my question is—and we can talk about it later in the actual go-round—do we need to have more of a buffer if we're going to do something extraordinary right now than what appears to be in the proposal? So that's just kind of a comment.

And then, for Thomas, on the communication options, does this necessarily have to be an FOMC communication? I just wonder, because we're not talking about the stance of monetary policy, we're talking about the implementation of monetary policy. Is it remotely possible that this could be a Desk communication, which would turn the heat down a little bit and put more focus on "this is just technical details of how we implement policy," so that there's less confusion that the FOMC is changing its stance of policy? Thank you.

MR. LAUBACH. I was looking here at your trusty general counsel. He will have to opine. I think that a very expansive reading of "open market operations" would also include outright expansion of your outright holdings. If you ask me, it feels like this is a sufficiently significant step that it would be surprising and might raise questions about whether this was a unilateral Desk decision that I would see advantages to having a communication that would clarify that, no, this was actually a Committee decision.

MR. KASHKARI. Thank you.

CHAIR POWELL. President Daly.

MS. DALY. Thank you, Mr. Chair. So my question, I guess, piggybacks off both President Evans and President Kashkari. Back to this September thing. I don't want to put too much weight on it, but we do seem to be hovering around "Let's get it back to September." But we've been—as Patricia briefed us, we started to see some movement, some volatility that might have been a warning sign all the way back in March.

And so my question is, really, when we're communicating about building reserves back up to get through the next several months, do we really need to put a date at which we're targeting it, or can we learn? Because part of it is, we're going to discuss, but part of it is, we're also going to learn about what the appropriate amount of reserves is to operate effectively and

efficiently. So I just have a question about why the focus is on September. At least we can do it internally, but would we really want to be external about it? And what are your thoughts on that, I guess, Thomas and Lorie, from your market outreach?

MR. LAUBACH. I will defer to Lorie in terms of, you know, how market participants might view the early September level as a focal point. It seems to me that what would be helpful is some clarity—you know, what your purchases over the coming months are trying to achieve. So if you just indicated, for example, a monthly pace, that may leave a little more uncertainty as to what you are willing to provide.

MS. LOGAN. Thank you, Thomas. I agree with Thomas that providing the sense of early September gives the market a focal point for what we're trying to achieve over the shorter-run period. I think that would be associated with communications about continued discussion that the Committee would be having on the efficient and effective level of reserves.

In terms of market expectations, we haven't seen a lot, in terms of the level of reserves the Committee would choose to maintain over some longer horizon. We've only seen a few market participants give a figure along those lines. I think most of the discussion that we've seen in the market is focused on a near-term issue, and there's a general understanding that the longer-run level of reserves that the Committee would deem to be efficient and effective would be influenced by other policies. And there's some expectation that there's going to be discussion of a standing repo facility or other policies that could affect the overall demand for reserves of individual institutions.

In my view, the communications about the near term is what the market will focus on, and then, after that, they'll start making broader predictions or expectations about where the Committee is heading over a period that goes beyond the end of the year.

MS. DALY. Thank you. That was very helpful.

CHAIR POWELL. Okay. President Mester.

MS. MESTER. So, Lorie, and maybe Thomas, is there a reason that you're focusing on the date, early September, rather than telling the markets the level you're doing? Is that because you don't want to associate a level—because you may change the level later on?

MR. LAUBACH. Lorie, why don't you—

MS. LOGAN. I think there was a sense that, from a communications perspective, there was some benefit in focusing on returning to a level before these events took place, but not being so precise at this point. From a market perspective, I think what they will do is look at the H.4.1 numbers from the first and the second week of September, and I think they will begin to communicate that it's a level of \$1.45 trillion based on that information. Really, that's a communications decision for the Committee and an important discussion point for today.

CHAIR POWELL. Vice Chair Williams.

VICE CHAIR WILLIAMS. Yes, I just want to point out, there's one issue about this level, just to clarify. When you talk about a level of a certain dollar amount, it sounds like we're targeting that level, and when you think about using temporary open market operations, you really can't think about targeting the level of reserves when you're relying on those open market operations. Because, as we've seen, the take-up of those operations depends on the circumstances at that point in time. Even with this plan, we can easily see the amount of reserves, inclusive of the open-market operations, fall below \$1.4 trillion. So there's a communications issue about, really, what we're trying to do, I would think, is supply a level of reserves into the system and consistent with the level of reserves that we've seen in early

September. The actual level of reserves during this transition period will actually depend on the take-up of OMOs, and that can be confusing if we put a number out there.

MS. LOGAN. I think it's also just worth highlighting the fact—which is important from an operational perspective and in how we would go about implementation—that the goal is to supply sufficient reserves so that you're consistently above that level. So that's a minimum level. On average, the amount that we would be supplying would be above that. And then that gets into an earlier question about how big a buffer the Committee would like to have to allow for those changes in nonreserve liabilities that then bring you back down. So, really, this is meant to communicate a minimum level that we would be aiming to supply reserves above.

CHAIR POWELL. Great. Any further questions before we begin our opportunity for—

CHAIR POWELL. There is. President Rosengren, I see you now.

MR. ROSENGREN. Tom also has a question. I'll go first. I actually have two questions. The first question gets to the word “efficient.” I was thinking that “efficient amount of reserves” referred to the amount of reserves necessary so that we didn't have to do overnight or term repos (RPs). And this memo seems to have a different definition of what “efficient” is that somehow allows both term and overnight RPs to go up or down, sometimes by fairly substantial amounts. So it would be useful to get a clearer definition of whether “efficient” means we don't have to do overnight and term RPs and our balance sheet is sufficiently large that we don't have to do that, or—what is the alternative definition to what “efficient” means? That's my first question.

And my second question is, if we think “efficient” is actually trying to avoid doing all this intervention by the Markets Group on a more regular basis, how many bills and notes could we buy over a relatively short period to expand our balance sheet so that we don't have as much

of an issue without disrupting the bill or the note market? Over a one-month or a two-week period, if we wanted to do something more substantial initially and then have a faster pace of purchase of bills, in order to get up to a higher level, what would the quantity be that would start becoming disruptive? Thank you.

MR. LAUBACH. I'll try and do the first one, and, Lorie, maybe you could take the second.

The communications that you issued in January actually do not exactly refer to an efficient and effective level, but they, of course, have this important clause that, you would like to be in a position in which active management of the supply of reserves is not required. Arguably, what the Desk is currently doing, with its heroic efforts, is pretty active. And so you can argue that, in fact, you would like your securities holdings to be sufficiently large that operations of this sort should be an exception—and not an ongoing activity.

MS. LOGAN. Thank you, Thomas. I think, also, just in terms of the memo itself, our focus was on the transition over these three months and not to define the steady state—which is where Thomas focused in his comments.

In terms of the overall size, in the memo we proposed \$60 billion of bills per month in the illustrative scenario 1. Based on some analysis that we've done looking at changes in the supply of Treasury securities when the Treasury has needed to move the bill supply up and down fairly rapidly, for reasons related to the debt ceiling, we've gained some experience about the amount of bill supply in the short run that wouldn't affect market functioning. Of course, we would learn along the way, but we think to start somewhere around \$60 billion, maybe a little bit higher, is where we'd feel comfortable from a market-functioning perspective.

Now, if we were to add other types of securities, I think we could add another \$15 billion to \$20 billion per month, if the Committee were comfortable, also with the Desk purchasing short coupon securities or even a little bit further out along the Treasury curve to get to a total of maybe \$80 billion per month or a little above \$80 billion over a one-month horizon. But I think, from an initial starting place, that's where we'd feel comfortable from a market-functioning perspective.

CHAIR POWELL. Before we go on to President Barkin, can I just follow up on President Rosengren's question? Maybe you answered this and I didn't get it, but—let's say we're at the end of April next year, and we have the level of reserves that is shown in the top panel in picture 7, and that we're growing organically from there. What would be our expectation going forward for the next 12 months, let's say? Would we then be able to look at the language that Thomas read and believe that we have a level of reserves such that we do not expect to be using open market operations to manage interest rates? Would we be satisfying that language at that time, or would we still be short of it?

MS. LOGAN. In terms of the projection that we're showing through the end of the year, as I mentioned earlier, the amount we're trying to fill by the end of 2019 was \$250 billion. We would need to fill another \$100 billion before April 2020. That would be inclusive of thinking about organic growth during that period, but organic growth purchases over the course of a year would probably average around \$15 billion to \$20 billion per month generally. But, in this first part, there's an amount that's needed well above that average organic growth over the course of the year.

CHAIR POWELL. So, with the extra.

MS. LOGAN. With the extra. Well, I think this forecast includes growth in nonreserve liabilities—it captures the organic growth in that period. So you would just need to fill another \$100 billion for the April period, and then after that you would grow, on average, whatever we determine to be that organic growth number.

CHAIR POWELL. My question really is, standing there on April 30 with that amount of reserves, do we believe we're in an ample-reserves regime, as we have defined it? Or do we believe that we'll still need to be doing intermittent repo and things?

MS. LOGAN. I think the focus that this projection is based on is the idea of limiting volatility over this short-run period: targeting a minimum level of reserves from early September plus the overnight operations. The longer-run level of reserves, such that you are relying purely on purchases, would likely be higher, but would importantly depend on the Committee's discussions about whether to maintain a standing repo facility or to take other actions to reduce nonreserve liabilities or changes in policy related to the demand for reserves. I think that question would need to be in the context of those longer-term questions.

MR. LAUBACH. Lorie, just for clarification, chart 7, for example, that's based on the assumption that you do purchases of Treasury bills through year-end, but not beyond then.

MS. LOGAN. That's correct.

MR. LAUBACH. Okay. So if you look at the April hole, if you continue to do some purchases, that would shrink that April hole.

CHAIR POWELL. Okay. All right. President Barkin.

MR. BARKIN. Thanks. This is just following up, I think, on President Evans's question one more time. We had a previous estimate. That estimate didn't play out the way we expected it to. Do we have any insight as to why? Did the banks that we talked to misestimate or

mischaracterize what their lowest level was? Were there process issues? Were those numbers not quite right at a time—were they worried about liquidity or otherwise panicking because of market movements? Just—do we have any insight as to why? That would help me on where we want to go.

MS. ZOBEL. I can discuss that question in the context of the Senior Financial Officer Survey, which is how we've learned about reserve demand, and through conversations with market participants. The majority of the Senior Financial Officer Survey respondents noted that internal liquidity stress tests and high-payment flow days were the determinants of their lowest comfortable level of reserves (LCLoRs), and so each of those banks responded for their own estimates of what their stress payment outflows might be.

Some banks consider this lowest comfortable level of reserves to be a hard floor. So it's a governance minimum, and they tend to hold cushions above that to make sure they don't breach that level. It could be that on high payment flow days, banks increase the cushion that they want to hold above those LCLoRs, and we heard a little bit about that from banks that day. So it might be that, under some circumstances, banks increase their demand for reserves on days that have high-payment flows.

Also, on some high-payment flow days, banks end up with unexpected surpluses of reserves. And what we know from the survey is that banks are not willing to lend those reserves to other banks in the interbank market, and we think of that as distributional frictions. I think we had a sense before that there were distributional frictions that we couldn't measure, and we talked about that a few times. I think what we found is that they are quite large, and the willingness of banks to give up these surplus reserves above the governance minimum is actually quite low, whereas we thought, in some environments, they may have been willing to relax those

surplus reserves they were holding. In this instance, they were not willing to do so. So I think those are the two things we learned: both increased demand on high-payment flow days and distributional frictions that may result in a higher level of reserves being needed.

MR. BARKIN. Thanks.

CHAIR POWELL. Great. Any further questions? Governor Brainard.

MS. BRAINARD. Just getting back to the Chair's question, we're using this "organic growth of the balance sheet" term pretty loosely. Can you just—what are we talking about? Is this trend growth in currency? Are you really thinking about compensating for all shocks to nonreserve liabilities and keeping that kind of smooth? It just seems important for this question about how much we're going to be intervening.

MS. LOGAN. So the way we were framing the discussion about "organic growth" is meant to be the average trend growth in all of the Federal Reserve's liabilities—which would include some trend growth in reserves as well. And so, on average, over the course of a year, I used the number of \$20 billion per month. Of course, that would depend importantly on the forecast of that trend growth, but something in that order of magnitude. Those purchases, depending on the level of buffer that the Committee decided to hold above this minimum level of reserves—that average pace might differ.

So, for example, if there was a lower level of buffer above this minimum level of reserves, then that \$20 billion per month might be quite volatile over the course of the year to maintain reserves above that level. It would still average that over the course of the year, but some months those purchases may be larger, and other months those purchases may be smaller. If the Committee were to decide to maintain a larger buffer over the minimum, then those average purchases would be more consistent across months over the course of the year.

CHAIR POWELL. Okay. Any further questions? [No response] If not, let's go ahead and begin our opportunity for comment, beginning with—did somebody raise—sorry. President Evans.

MR. EVANS. Well, I did have one more question. I don't mean to get ahead of anything, but we did have the options for communications items laid out. And one issue is timing there, in terms of whether or not we wait until the October FOMC meeting or we do something sooner. I think, Chair Powell, that you're going to be speaking at the National Association of Business Economists (NABE) convention next week on Tuesday. And I guess a question I kind of have is, how do you anticipate touching on the money market issue? Or would you be thinking about talking about it at all?

CHAIR POWELL. Yes. No, it does, to some extent, depend on what we decide today. I am planning on getting that question, and I'll have to have a good answer. If we come to a broad consensus on what to do and also agree that we might move to do that next week at a meeting, then I think it would be a good time to maybe lean a little bit forward and foreshadow that. And I would expect Vice Chair Williams to do the same, as the head of the New York Fed. So that was the thought.

If we're not there, then I'll certainly play off what we agree to and discuss today. In a sense, if we are going to make an intermeeting announcement, it would be good to telegraph it a little bit, I think, just to sort of take some of the buzz off that so that it doesn't seem completely out of the blue if the market already has a sense of what we're doing. If that's where we're going. Again, I haven't decided that yet. Any more questions?

MR. EVANS. Thanks very much.

CHAIR POWELL. Okay. Thank you. Any other questions? President Daly.

MS. DALY. Sorry. When I saw President Evans going for two, I decided to go ahead. The one question that I have that's still—I don't know the answer to is, if we go in and we do these things to smooth us through—and I'm not against it—are we taking away, in your estimation, any chance that the market can create some more financial resiliency by doing better about intermediating with each other? Or are these just fixed, hard things that you have discovered that aren't changing? And I just don't know where you are on that.

MS. LOGAN. I think it's important to look back over the course of the year as the level of reserves has been declining. We have seen banks with surplus reserves lending those into the repo market. So some of the changes that we've been seeing and the correlation between movements and repo and unsecured have been because banks have been lending more or less of some of that surplus into the repo market based on price movements. There is some distribution that's taking place. That distribution tends to take place more in the repo market, as Patricia discussed, and less in the interbank unsecured market than it did pre-crisis because of the regulatory frictions associated with the cost of balance sheet for those two types of transactions.

That said, not all banks lend in repo, and so I think if we were going to see an enhancement in that distributional process, some banks that don't currently do that type of transaction would have to begin to do that, and that's not part of their business model today. That's particularly true for some of the large domestic banks outside the SIFIs and also with regional banks as well. And it's unclear what type of price that would require for them to change that business activity and over what length of time.

CHAIR POWELL. Other questions? [No response] I don't see any hands waving. All right. Let's begin our opportunity to comment, beginning with Vice Chair Williams.

VICE CHAIR WILLIAMS. Thank you, Mr. Chair. And I'd like to thank the staff here and the New York Fed and our colleagues at the Board and elsewhere for the "heroic"—I agree with Thomas there—efforts to analyze and distill a lot of information from supervision, from our market outreach with our economists, to really come to an understanding, as best as we can, of the events in the past few weeks and to come up with policy interventions that I think have been very effective, at least in the past few weeks, at stabilizing conditions in money markets and, obviously most importantly, keeping the federal funds rate well within the range.

In thinking about the topic for today and for our next meetings, I do think it's important to start from the decision that the FOMC made, in January and then in following meetings, about having an ample-reserves operational framework. I think this is the right decision. This is the decision that, you know, we discussed at length. And we also discussed, as part of that, a plan to monitor, analyze, and assess at what point we think the level of reserves is at a level appropriate to carry out, on a sustained basis, this ample-reserves framework. And the way I think about this—and this gets back to President Evans's comment and questions and President Rosengren's, too—is by asking: Is it an ample-reserves regime? We are not doing regular or frequent open market operations. So that's just, I think, the way we've understood it, and that's what success will look like in the medium term.

In light of the events of the past few weeks, I think that it's really important to—the points that both Patricia and Lorie made, that we've actually been watching for many months an evolution in the behavior in these markets. We've seen the funds rate spread to the IOER rate rising gradually as the level of reserves has gone down. We've seen issues in terms of the spread of interest rates, and now we've seen, as of mid-September, just a lot more sensitivity of the repo rates and the federal funds rates to shifts in the underlying payments and demand for reserves.

One of the things we also learned from that period was that in the situation of the market being under stress, market participants, as we know they do, tend to hunker down and go into a defensive mode. So instead of lending into that market, we saw a lot of pulling back from that and therefore, I think, amplifying some of the movements in repo rates and funding rates. And we've seen, as we've been doing regular open market operations and we did the term operations that were at quarter-end, that that concern about "I know I have funding today, but what about tomorrow and what about next week and what about quarter-end?" has damped down, and we've seen that be successful.

We're looking at all of these indicators over the past six months or so and especially the evidence from the past few weeks. It's clear that we are close to, or around, a level of reserves in the system that will support an ample-reserves framework.

I will just note something. You know, we talked about, why early September? How to think about that is that we were running around \$1.45 trillion to \$1.5 trillion in that period, and then, as we saw the reserves come down, that's when the stress really did become amplified. As we've brought in up to \$150 billion to \$200 billion into reserves, as you can see in this chart, we did bring the total quantity of reserves, including open market operations, back up to that level, and markets seemed to be functioning. So that's another data point that, at least over the next several months, this level seems to support well-functioning money markets.

So in terms of how I'm approaching these issues, I'm thinking about the medium-term goal of getting to a sustained ample-reserves regime. If we were in a world in which everything was growing very smoothly, that would just entail growth, this organic growth, in reserve balances. But as you see in figure 7, you know, you look at the gray part of figure 7—without actions, the amount of reserves in the system, due to some seasonal and other factors, will

decline to below \$1.2 trillion around year-end and again further lower, with the April tax payments timing there. So if we don't take actions, it's not just about maintaining the current level of reserves—we will actually see reserves decline quite a bit. If you wonder what picture keeps me up at night, it is this picture—it's about the need to take action relatively soon, in order to keep reserves ample on a sustained basis.

Again, I think about this longer-term or medium-term strategy. It does consist of both a transition to get through the year-end and a longer-term sustained level of reserves, and the way we talked about it such that the amount of total reserves in the system doesn't dip below this current level very often. And then I think about OMOs, whether it's a standing facility or however we operate, thinking about next April or May and on—those are only there as a backstop for quarter-ends or other days when big payment shocks cause there to be some stress in the market. Again, going back to President Rosengren's comment, a successful ample-reserves system is one in which we are not doing frequent open market operations actively, and perhaps with some kind of backstop there just to provide that support.

Again, I think an important point is what we've learned—and Lorie made this point very clearly—is that bank reserves are not perfect substitutes with open market operations. Open market operations, whether term or overnight, especially at scale, do not pass through directly through the financial system fully and, therefore, I think, have some important limitations, as we think about the long-run or medium-term strategy.

In terms of the transition, I do think that we do need to get through the end of the year with interest rate control. That is an important part for the FOMC and for monetary policy. So we do need to have, as we transition through the next several months, a combination of purchases and a building-up of the bank reserves over a period of many months so that we have

that level by, you know, April or so that we are in a place then where the ample-reserves regime is operating as designed.

To get us through that period, given this decline in reserves, I think a combination of overnight and term repos will be there to supply reserves into the system to support the FOMC's directive for the federal funds rate to be in the target range. I do think we need to have both of these pieces, because the long run requires us to get bank reserves higher, but to get through the next few months, we're going to need repos to support that. And, again, I think there is a matter of needing to move quickly because we need to get the level of bank reserves higher, in order to have confidence that we have good control of the federal funds rate. In terms of delay, it just means that you have to do more per month.

On the communications issue, I think it's really important that this is not about the stance of monetary policy. This is really about the execution of monetary policy. We've already described our ample-reserves regime. We're told everybody that we would be monitoring and analyzing and coming into a view, and when we got to that view, that we're maintaining those level reserves. And so it's really about executing on a plan that's out there. I do think we have to avoid any perception that this is a restart of quantitative easing or of "asset purchases for monetary policy," from the point of view of monetary policy stance. So there are some pretty strong advantages associated with gradually, initially, building the level of reserves up in such a way that we maintain the level of reserves. I think buying Treasury bills—T-bills, or potentially shorter-term Treasury securities, or both—can make that point clearly.

The other thing that I, again, think is important is that we're really trying to lay out this medium-term strategy. We are laying out a strategy about how to get through April, and that's, I think, kind of the context of all of this. Then there's the issue that we have to do about how do

we get to that. I think what will happen with the markets is, they already expect us to announce something, a large scale or \$200 billion, \$250 billion of T-bill purchases or something. So they're already kind of thinking that that's what we need to do, under our ample-reserves regime.

I do think there are some advantages in providing greater clarity that that's what our approach is over the next six, seven months. I think that what we've learned also is that with year-end coming, having that clarity and understanding in the marketplace earlier reduces some of this worry and stress around what's going to happen at year-end and some of that behavior.

I also think it's important that we have this flexibility in our approach. One of the things that's come up a lot is, you know, we don't have all the answers about why things happened. There's ambiguity about the appropriate level of reserves. There's going to be continued learning, continuing analysis as we move forward. And so from my point of view, success right now is laying out an overarching strategy of how we plan to get through April, what success looks like. Thinking about April, how we get from here to there, but also having that flexibility that as things evolve, how are we going to adjust our decisions and plans about that. And I do think, from the point of view of market communications, that, right now, markets are not focused on us making a decision anytime soon. They are thinking we're waiting until October. But I will assure you that between now and the October meeting, the amount of chatter and comments and articles and people talking about "What's the Fed going to do—they need to have a plan, they don't have a plan"—it's just going to rise and rise. So even though they may be saying they're not expecting anything until October, I think there's just going to be a lot of uncertainty and debate out there. And if we're silent on this and we're not expressing our own strategy and plans ahead of that, I think that that could also be somewhat disruptive. Thank you.

CHAIR POWELL. Thank you. President Rosengren.

MR. ROSENGREN. Thank you, Chair Powell. I have learned that the cost of running too efficient a balance sheet is greater than I thought. Repo rates have been more volatile than I would have expected from relatively routine shocks, and I have been surprised by the reputational effects, which are also much greater than I thought, in two dimensions.

One is, as Vice Chair Williams just highlighted, the repo market is now the subject of regular news articles. It's not good if I know my plumber's phone number without looking it up on a phone. [Laughter] And it's probably not good if financial plumbing becomes the questions of nonfinancial reporters. And so my own experience has been that, at every talk and in every briefing with a reporter, these questions are coming up. There is much broader interest in something that we probably ideally should be doing in the background.

The second concern I have on the reputational effects is, there are a lot of misleading articles, frequently by people who don't quite understand what's happening in the money markets. But they're making associations to the financial crisis or to other kinds of disruptive economic concerns, and I think that's really problematic at a time when there's a fair amount of uncertainty about the outlook. So those reputational concerns are something that I think we ought to think about, in terms of both the urgency and speed with which we address what's been happening in the money markets.

My own preference would be to have an abundant-reserves regime rather than an ample-reserves regime. I know I have lost this debate, but I think we've learned the costs are actually larger than I might have thought, and I think this is the appropriate time to think that maybe there's little cause for taking out more insurance against the volatility we've recently seen. And given that these reputational risks seem a little bit greater, I'd prefer not to be so close to the upward-sloping part of the demand for reserves.

Among the choices we were given in the memo, my preference would be, obviously, to go for a faster pace of bill purchases, which raises the balance sheet more quickly. So, of the options, that would be my preferred option. However, my preference would be to be bolder. As the memo highlighted, there are going to be more downdrafts and reserves next year. I'd prefer to announce a technical adjustment relatively soon—involving a larger expansion of our balance sheet, possibly including notes and bonds, in light of some of the Q&A that just occurred, in addition to more quickly increasing the bill purchases. This would more quickly get away from the need for term repurchase agreements and have us better situated for lower reserve balances next year. Thank you, Mr. Chair.

CHAIR POWELL. Thank you. President Harker. [No response] You're on mute.

MR. HARKER. I am. There you go. Thank you, Mr. Chair. Maybe it was better when I was on mute. [Laughter] Although I share the immediate concerns for our money markets, I would like to briefly start by posing two fundamental questions that go beyond the recent developments. First, I think we need to ask ourselves if the existing regulations or supervision explicitly or implicitly favor reserves over other high-quality liquid assets and are interfering with market functioning. The second question is whether the federal funds rate remains the best choice for our policy target, given that the unsecured lending market is decidedly thin compared to the repo market. Now, these questions are not on the agenda today, but I believe we should revisit them and other fundamental issues in the near future.

Regarding the pressing operational matters, I believe we should take action as soon as possible to keep the level of reserves somewhat north of \$1.4 trillion through the end of the year. I suspect that a lower level of reserves could still be compatible with an ample-reserves regime.

The introduction of a standing repo facility could improve rate control, and, over time, market participants may become more flexible in their liquidity management.

All that said, there is little to gain by letting reserves decline further at this point and much more to lose if we struggle with interest rate control. With regard to the questions of how to stabilize reserves, I have a preference toward outright purchases of Treasury bills in the faster-purchases scenario, effectively restarting the organic growth of the balance sheet. To avoid impairing markets, the right mix should also include term repo operations as well as overnight repo operations as a backstop for rate control.

So, like many things in life, “Timing is everything,” as they say. Let me turn to the question of whether to announce our actions before the October FOMC meeting. I actually see both pros and cons to this. In light of the large shortfall of reserves projected by year-end in the absence of actions, an early start to purchases would be helpful and allow a smoother and slower pace. Yet moving early may surprise markets—which could, in turn, lead market participants to believe that there are broader concerns about financial stability or liquidity. For me, the tiebreaker is the ever-present risk that our actions may be misperceived as a change in our policy stance.

The silver lining—if there is a silver lining in the September episode—is that this has actually made our communications, in my mind, a bit easier, giving us a real-life illustration of the kind of episode that we aim to avoid by restarting the organic growth of the balance sheet. That said, we cannot be too cautious. A decision today and an announcement shortly thereafter would put further distance between implementation decisions and the stance of monetary policy, particularly because we cannot discount the possibility of a rate cut in October. Thus, I favor taking immediate action.

On a similar note, we should strive to offer a unified message and, as President Bostic once said, “repeatedly repeat” that our actions regarding implementation have no bearing on the policy stance. So I’d like to save our occasional disagreements for monetary policy but strive in this case to try to send a unified message. Thank you, Mr. Chair.

CHAIR POWELL. Thank you. Governor Quarles.

MR. QUARLES. Thank you, Mr. Chair. So I’ll join what I’m sure will be a tsunami of thanks to the staff for the quick and clear analysis of recent repo market developments. I know how much work that has been and, particularly, the time constraints that it has been done under.

So much more is clear than was clear two weeks ago, although there is still a bunch that remains unclear. But my current view is that the recent spike in rates is primarily indicative, as President Harker was suggesting, of structural features in our regulatory framework that have introduced rigidities into the system’s ability to allocate reserves across institutions. In the absence of those regulatory and supervisory incentives and disincentives, which we have introduced into the system, my current hypothesis on the basis of what we’re hearing is that the current overall level of reserves would be abundant—should be more than abundant, or ample, or whatever the correct word is—and I view the problem as one of allocation rather than scarcity.

Now, directing those incentives would be a midterm project, and we have a short-term problem. And today’s discussion is to focus on handling the short-term issue. I don’t want to distract us from that. On top of that, the regulatory and supervisory issues that I think are in question are matters for the Board rather than the Committee. That’s why I mention that point whenever raising regulatory issues in an FOMC meeting. But I do think that my particular contribution to this discussion is at least to lay out how I see those issues having contributed to

the market disruption, because I think that's important context as we consider the short-term solutions that we have to decide on.

So what's the source of the allocation problem? Banks have told us—and the largest banks have particularly emphasized this—that they feel under supervisory pressure for reserves over short-term Treasury securities in satisfying their liquidity requirements in a post-crisis framework. Now, as most of you know, they cited other regulatory incentives as well that are related to the leverage ratio and the calculation of the G-SIB surcharge. I think these latter two are much less likely to have been particularly relevant to the events of September, but I do think that the unwillingness of the large banks to part with reserves at any price in September is showing us that we need to address those incentives that are biasing some banks to hold reserves over Treasury securities. And, again, just to review for everyone, the consequences of the current liquidity measures come from two principal elements: the Liquidity Coverage Ratio and the internal liquidity stress tests that we require banks to run. The Liquidity Coverage Ratio—again, as almost all of you know but maybe not all of you have at the top of your head—establishes a minimum that firms have to comply with. It's based on standardized definitions and outflow rates. And under the Liquidity Coverage Ratio, the actual regulation—there's no difference between reserves and Treasury securities. It is indifferent. The stress tests are not, necessarily.

In 2018, for example, our supervisors conducted an internal liquidity stress-test buffer monetization exam, looking at how the firms were assigning appropriate monetization haircuts to highly liquid securities in the event of stress. And there are differences in the speed and ease of monetization of Treasury securities and reserves, and that will show up in the banks' internal liquidity stress test.

Now, our peer central banks do not conduct supervisory operations that provide for any differentiation between reserves and high-quality liquid assets in securities form. I've spent a fair bit of time since mid-September on the phone with my counterparts at the Bank of England and ECB, who were quite direct about that. And, interestingly, the ECB, for example, has a much lower level of long-term demand for reserves, as I've mentioned in the Committee before—close to \$400 billion relative to what, in our case, had been, at one point, \$2 trillion and now \$1.45 trillion or higher.

Now, a standing repo facility would be important in conjunction with this, and I'm looking forward to our discussion at the October meeting. Part of the concern with these internal liquidity stress tests is that there is a difference between the monetizability of reserves and Treasury securities and stress—it's not huge, but it is there. And a standing repo facility—or at least the Platonic ideal of such a facility—would dramatically reduce or eliminate such a difference and, therefore, reduce or eliminate the different treatment of reserves and Treasury securities in banks' liquidity stress tests. The ECB, for example, has a facility through which the central bank monetizes nonreserve high-quality liquid assets, and this is likely to be a factor in their much lower long-term level of reserves demand—although negative interest rates are also a strong contributor, obviously.

So such a facility would be helpful in handling periods of stress, but it would also likely lower the overall demand for reserves by guaranteeing the convertibility of Treasury securities. We have been told by U.S. banks that this would likely be the case and, therefore, would have made the events in September much less likely had it all been in place by then. But we do not yet have really the rough quantification of the size of this effect, and the details around such a facility would be complex. Much remains to be worked out. So recognizing that we either use

supervisory changes or a standing facility, it's my view the more fundamental solutions to the problem are likely to materialize quickly. Recognizing that we're not sure what the scale of the effect on the demand for reserves would be even if we do implement these measures, and we have to have a plan to cover the near term. That will likely require, in addition to the current levels of reserves, whether and to what extent these structural rigidities can be addressed.

So I now turn to the topic for today—the potential plans for expanding the balance sheet detailed in the staff memo. Principally because I view this as an allocation rather than a level problem, if we were to grow the balance sheet, I'd like to do that in a way most likely not to confuse our actions with a renewal of QE. There are fraught communications issues in resuming balance sheet growth at this point and seemingly under duress. I prefer buying bills in order to have the least effect on the market for duration. My preference would be for smaller interventions. I'd like to keep the amount as close to the organic growth of currency demand as possible, but I do recognize that “as close as possible” may, in fact, be quite a significant addition to reserves in the near term, in order to address this short-term issue.

As we think about how all of this will evolve over the longer term, I think we should keep in mind the potential effects of our ability to address these incentives. Thank you, Mr. Chair.

CHAIR POWELL. Thank you. President Daly.

MS. DALY. I'm sorry—I thought I was in the order last. I'm ready to go, though.

I'm supportive of announcing in advance of our next scheduled meeting, frankly, that we intend to rebuild and maintain reserves at or moderately above levels prevailing earlier this year. This would provide assurance to market participants—and to the public more generally, to the

extent that they are following this—that we remain committed to running an ample-reserves regime, and that we will adjust reserves as needed in order to execute on that strategy.

Like Vice Chair Williams, I would like to remain flexible and focus on our goals of interest rate control and providing ample reserves in order to execute on that. I worry if we provide too much detail—although Thomas and Lorie convinced me of September having some benefits, too much detail, I think, could signal too much confidence in the quantity when we're actually not sure about that. We have a lot of uncertainty, and we're going to continue to learn. What we're really sure about is that we want the funds rate to trade within the range, and the rest of it is something we're going to learn about. So I lean toward fewer details—as few as would be reasonable—and more framework and commitment.

Now, in terms of the two options presented in the staff memo, I'm in favor of using purchases of Treasury bills as the primary tool for ensuring an ample supply of reserves. I tend to favor the approach of a faster pace of bill purchases. Indeed, much like President Rosengren, I would like to even consider an alternative strategy that front-loads these purchases, taking the opportunity of making a technical adjustment because there's so much emphasis right now on the disruptions in the repo market and perhaps make some immediate larger purchases to the extent that the market can withstand it in order to get us back up to a level that's more comfortable. We could then allow the balance sheet to grow more organically as we learn about the desired level of reserves and whether to use a standing repo facility. And here I support the idea that has been discussed by many that the standing repo facility, even if we have it, should be something we occasionally use. My understanding of an ample-reserves regime is we rarely need to go to that—only for payment shocks.

So now, in terms of communications, which seems like the most challenging part of the discussion, I prefer that we announce this as a Committee decision, not a Desk decision and not a Desk announcement. Like Thomas indicated, this seems like a sizable decision—and one that we should take ownership of. Importantly, I think we can take control of the narrative. Right now, the narrative is being written for us. And it's often not very positive, as President Rosengren mentioned. The opportunity for us to go in and say, "This is not QE, this is really the plumbing, this is a technical adjustment. We're committed to having the funds rate trade within the range we've stated"—I think those are things that, if we have unified talking points, we can absolutely accomplish.

I'm not just optimistic. I've actually been in situations like many of you—more than I'd like to be, really—of being asked these questions by my board of directors, by outside participants, many of whom are involved in markets. And when you go through the details and explain the framework and explain what we're doing, then they get it. And I think this is enhanced by being at the short end, using bills and not longer-duration purchases. That really kind of tells them that this is not QE, it's really technical adjustments.

So I believe that we can do this. I would like to see us do it earlier, so that we don't confuse distinct things. It's just another opportunity not to confuse the stance of monetary policy with the plumbing or the execution of policy. So with that I would say, thank you, Mr. Chair.

CHAIR POWELL. Thank you. President Evans.

MR. EVANS. Thank you, Mr. Chair. I want to thank New York and the Board for all the hard work. This is an area in which helping educate us all on the details of money markets and how they behave and new development here is really important. So I appreciate all of that.

The big-picture issue for the FOMC seems to be this: In the implementation of our monetary policy, we need money markets to reflect our monetary policy setting. An important channel of our monetary policy transmission mechanism is directly through credit intermediation that supports our growth and inflation mandates.

The Committee's recent actions to cut rates have worked to recalibrate our policy setting to a more accommodative setting of the federal funds rate. Unexpected financial volatility in money markets that's symptomatic of weaker, poor market functioning increases the cost of credit intermediation. Unintended additional volatility may frustrate our recent policy actions. So making adjustments to our programs here—that's not monetary policy, but it is important for monetary policy.

This is likely to be a challenging issue, as our preference for pointing to the setting of administered rates, like the IOER rate and the ON RRP rate, will likely be less powerful alone. That is, as the IOER rate is reduced further within the funds rate target range, the market's determination of the federal funds rate is becoming less about arbitraging administered spreads to the IOER and ON RRP rates, and it's more about arbitraging spreads to money market rates, which we don't control directly. And I think the size of reserves in the system probably influences which arbitrage is going to be most prevalent. So that's why that's going to be important for us. This tells me that our earlier, better experience when we had a clearly ample quantity of reserves was important. We haven't defined "ample" precisely—but the recent market disruptions are clear evidence that reserves have fallen below "ample."

So the question now is, what's the best way to get back to an appropriate level? And I think Governor Brainard's question about—we're talking about organic growth a lot. What do we really mean by that? I agree with Lorie's response that there are trend factors that we're

going to be paying attention to, but it's also going to be the case that the market is going to continue to evolve, and signs of dysfunction are going to be another indication of how those other nonreserve liabilities are evolving. So there's going to be a lot going on, and we shouldn't be surprised if we have to revisit moments like this. I doubt that organic growth is going to be the easy type of in-the-background assessment that we would all like.

Second, we obviously need to implement a near-term fix in order to keep money markets best aligned with our policy setting. But we also need a longer-term plan for how we will maintain an ample-reserves regime over time. It seems clear to me that such a plan will include Treasury security purchases. Near-term issues aside, over the longer term, we will need to grow our balance sheet to keep up with organic growth in currency and other nonreserve liabilities. We will do this by buying Treasury securities, just as we always have. So we should coalesce around a long-term implementation plan that includes regular asset purchases.

It makes sense to rely on Treasury bill purchases now as much as possible to address the immediate problem of our current reserves shortfall. As I understand our risks and policy objectives, I favor emphasizing bill purchases to add the majority, or lion's share, of the new reserves and using a combination of daily and term repos to fill in the market-functioning details. So I think that the \$60 billion per month T-bills proposal is better than the \$30 billion per month proposal. I agree with the Daly–Rosengren proposal so far, about making a one-time program of additional purchases of some size to close the gap sooner would be helpful.

Now, I recognize that some have worried that outright bill purchases may be misconstrued as a new round of quantitative easing. I think that's a communications issue that can be dealt with quite adequately by the Chair and supporting commentary coming from all of us and also publication of the implementation details. Basically, with quantitative easing,

monetary policy took duration out of the hands of the private sector and placed it on our balance sheet. We're talking about purchasing short-term bills. It's not going to affect duration in the hands of the private sector. It's really all about duration, I would say, for anybody who's paying attention to what the actual thrust is of QE purchases we're supposed to be doing. Short-term bill purchases will not add to duration meaningfully, and this just really becomes a communications task.

Third, there's undoubtedly much to learn about financial stability from the past few weeks, and we've already heard commentary by President Harker and Governor Quarles about the implications of regulatory policy—supervisory interpretation of things that are interesting and we should digest better. One lesson that's been driven home for me is the value of ample reserves and facilitating the intermediation process and in preventing an amplification of market volatility. The ample-reserves regime has proven its ability to prevent small shocks from turning into big problems. One conclusion I drew from the memo is that there's a good chance that the early September tax payments and Treasury security issuance would not have even shown up on our radar screens if reserves had been higher—say, at the level of just a few months ago. Indeed, an implementation regime that can handle these kinds of shocks seems to be exactly what the Federal Reserve Act had in mind when it told us to furnish an elastic currency.

I'm uncomfortable with communicating a message that our balance sheet goal is merely reserves at the level of early September. We need to make sure that we've got a large margin for error, and that's why I asked about other assessments of what those numbers might be. Some of those numbers were larger, and some were smaller. So we need a larger margin for error. I don't know what that number should be. I'd err on the side of making sure we had plenty. The

cost of another failure could be really quite immense, and I'm not sure how many mulligans we have in our pocket if we don't get this right the next time.

It's certainly the case that regulatory adjustments for some of the largest banks that are worried about the Liquidity Coverage Ratio and the supervisory implications could be an important aspect to that. But I go back to what we were thinking about when we said, "We want an ample balance sheet, and we're focused on efficiency." Efficiency always sounds like an excellent idea. and I'm an economist, so I certainly subscribe to—we like efficient outcomes. But in this context, it always struck me that efficiency was more about "optics" and people criticizing the Federal Reserve for having a profligate size of the balance sheet. We've already sort of incurred some costs for wanting a somewhat lower-sized balance sheet, and if we go the route of just adjusting regulatory policy somewhat, hoping that that will help us, I think that that's got quite a lot of risk. I would describe that as a risky strategy, myself.

Lastly, I agree with the suggestions that we should communicate earlier. I asked about the NABE speech. I would be completely comfortable with the Chair taking the lead early on describing all of the issues that are in front of us and providing some indication of what the Committee action is likely to be. Bolder is safer, I think, for our monetary policy and the objectives that we have. Thank you, Mr. Chair.

CHAIR POWELL. Thank you. Governor Clarida.

MR. CLARIDA. Thank you, Chair Powell. It is customary to thank the staff, but thanks are especially warranted this time. And also, special thanks to Vice Chair Williams, who has led the effort and brought us to a good set of notes and materials for discussing this.

So let me just chime in. I'm broadly supportive of the outlines of the effort that have been outlined in the memos that would combine a resumption of bill purchases with the

announcement of a term operation, very understandably to deal with quarter- and year-end issues that are well-known—tax issues in April—and the flexibility to announce the overnight repo operations as well. I'm also sympathetic—and, indeed, think, for communications purposes, that the artful approach here is useful to us—to put in the language with reference to the September level of reserves but also indicating that we would probably want a cushion above that, but to leave that with a degree of ambiguity to give us the ability to be flexible there.

The reason why I like that approach to communications is that we announced in July that we were bringing the process of balance sheet reduction to an end, and we also indicated that we would be learning about the appropriate point and that we would resume purchases. And putting this in September and achieving that level, I think, provides us with a bridge between the July decision and what will be the October decision.

I agree with Presidents Daly and Evans and others and, I think, President Harker. I would certainly strongly urge that we do this before the October meeting. I think that would serve a couple of purposes. It would serve the purpose of distinguishing between an ambitious but ultimately a technical action in the functioning of the markets from a policy decision. Literally, there would be time between those two announcements. Also, we'll have important issues to discuss in October. It would give us more time to do that. So I am very enthusiastic about doing that before the next meeting.

In terms of preference for the details, again, the broad plan, I think, is a good one. I would have a preference for something similar to option 8 on exhibit 2, but with the addition—that I think both Presidents Rosengren and Daly mentioned—that, instead of having a constant amount of purchases over the window, would think of some months where there would be some bunching of purchases at very high levels. My preference would be to put that in December,

January, and April, because folks know that there are year-end effects and tax effects, and I think that could be more readily communicated—the technical adjustment to the level of reserves through outright purchases. Again, I think we'd need to keep the term repos in place, but as opposed to, say, doing \$60 billion a month continuously, do a somewhat smaller—perhaps much smaller—number in most months and then really loading in big purchases if that were technically possible.

Let me conclude with a couple of longer-term thoughts. Again, I know our interest is the near term, but I do think I'd like to provide some context on some points that Governor Quarles mentioned. I do think we're going to end up, at some point, with a standing repo facility. I think that can be potentially helpful in a lot of dimensions that we've discussed. I know that's not on the table today, but certainly my own view is that it's going to have to be an element of a longer-term solution.

One thing that I did pick up in my conversations that we had with the Treasury Borrowing Advisory Committee (TBAC) crowd when they were at the Board last week is that it will be important to get the details and the way we communicate a standing repo facility, right? If we really want this to be a facility that we use as a substitute for having high reserve levels, then they need to know that they are able to use it in size. We'd have to think about the pricing, we'd have to think about the spread and all of that. But, again, I think that's where we're going to end up, and I think that's an important part of the longer-term resolution here.

Let me perhaps offer a cautionary note on the issue of the funds rate versus the repo market. Clearly, the repo market is much more important than the funds market now, and the funds market is a different funds market than it was before the crisis. But that being said, I would urge that we give a longer-term and really serious discussion over time to moving

aggressively to actually publicly pegging a repo rate. That has some benefit but also some potential cost, and I certainly would not right now embrace that as an immediate step. And the primary reason is that the repo market is much larger.

I had my staff print a chart of the daily spread between general collateral (GC) repo, and the funds rate going back 45 years. That spread moves around all the time. You can have a well-functioning, growing, healthy economy in the '90s with the repo and the funds rate spread moving around. And there are some reasons why that spread moves around. The art to doing this is we don't want a replay. The move in this spread on September 17 was the largest spread in the history of the data set going back 45 years times 250 days a year. So, yes, you don't want those moves. But on the other hand, I would be nervous about publicly committing us to the repo rate being plus or minus 1 basis point. So we would have to be careful if we moved down that road. I'm not saying we are moving down that road, but that would be a consideration.

And then, finally, and I'll close on this, the staff has offered some good ideas about bridging between now and April on what we call the temporary open market operations. At least one thing I'd put on the table is perhaps keying the decision to do those operations to where the funds rate itself trades. So, for example, on a day when the funds rate is within 1 or 2 or whatever basis points of the top of the range, we might announce an operation. And then that would make it clear that, at least now, this is about controlling the funds rate. This is about keeping the funds rate in the range. And, again, there may be problems with that, but it's at least something to think about down the road when we're talking about the detailed design of the temporary operations. But, again, I do think this is going to be a necessary step. I like the idea of bridging between the July decision and what we would be announcing, and I very much like the idea of doing it before our October 30 meeting. Thank you, Mr. Chair.

CHAIR POWELL. Thank you. President Kaplan.

MR. CLOUSE. Somebody dropped off the phone. We may have lost him, actually.

CHAIR POWELL. President Kaplan, are you there? And are you not on mute? [No response] We'll go to President Bullard. Sorry, President Barkin. And if President Kaplan comes back, we'll have him. So, President Barkin, please.

MR. BARKIN. Thanks. Like others, I agree with the notion of bolstering reserve balances. The story I would tell is, we said we would gradually shrink the balance sheet and learn where the point of scarcity might be. We seem to have found it. We're not bothered by the fact that it was somewhat earlier than we might have thought. "Excess reserves" in practice were just less than we had analyzed, and we've learned from that.

I do worry that a message of \$60 billion a month will be misinterpreted as a return to QE, as it does appear comparably scaled. Our communication needs to emphasize that this is about liabilities, not about assets. It's a reserves-maintenance program, not a balance sheet expansion. In line with the options presented in the communication, I would just communicate the point that we will maintain reserves at a minimum level, perhaps consistent with early September, and to do that we will conduct a limited-time technical adjustment as necessary.

I also worry that we, and the media, overfocus on volatility. Some volatility is inevitable. Perhaps echoing Governor Clarida: From 2000 to 2006, for example, we had 30 days on which the effective federal funds rate was plus or minus 25 basis points away from target. So I believe expecting zero volatility is not a sensible platform. Instead, I'm very supportive of a strategy that lowers the cost of volatility when it inevitably happens, and the right repo facility has the potential to do that.

As we think about longer-term items—and this might be naïve—I’m struck by the fact that we own a regime of managing reserves to keep rates stable while we also manage massive swings from the Treasury’s General Account. Is there not some way to insulate reserves from these fluctuations? I’d love to explore any such options. Thank you.

CHAIR POWELL. Thank you. President Bullard.

MR. BULLARD. Thank you, Mr. Chair. I’m generally supportive of Desk recommendations on these issues to carry us through the current quarter and over year-end into the first quarter of 2020. But I do think that this has an *ad hoc* feel to it. And because of that, I think it requires careful management, especially around the quantitative easing issues as just articulated by President Barkin.

Like others, I think a standing repo facility would greatly mitigate many of the key issues that we face. There does appear to be a preference in markets for reserves to meet regulatory requirements concerning liquidity, such as the Liquidity Coverage Ratio (LCR), and I agree with President Harker and Governor Quarles on this issue. Governor Clarida also brought this up. I think this is a very important source of distributional issues within this market, and one that could be mitigated greatly by a standing repo facility.

Another issue that we face is that we don’t want the federal funds rate trading above the upper end of the range, but repo would remove this. A standing repo facility would fix this. And also, we would meet an international standard. Other central banks operate with a repo facility and a reverse repo facility. So I think we could definitely go in this direction over the medium term, and I know we’ll have an opportunity to discuss this more at our upcoming meeting.

One thing about a facility is that reserves could potentially be lower because of expectations effects—that is, knowing that the facility is there, knowing that it’s credible, and

that institutions are going to be able to go to this facility would reduce the desirability of reserves inside the market. From a monetary policy strategy perspective, this would be an important development, because it would give the Committee more policy space should we eventually want to return to true quantitative easing at some point in the future in reaction to a particularly negative shock to the U.S. economy.

On communications issues, I think that the measures being contemplated today should be characterized as temporary in nature, pending a more permanent solution. I think that might be the right language here. I would also concur with others that we should announce before the October FOMC meeting in order to separate this decision from the policy decisions that could be made at the October meeting. I think it might muddle our message in October, no matter what way the Committee goes, if we try to announce this at the same time. So I think that, by announcing sooner, we have a better chance of keeping this as a technical adjustment sort of feel to it, and we have a better chance of addressing the idea that this is not a return to quantitative easing in the United States despite the return to quantitative easing in Europe. Thank you, Mr. Chair.

CHAIR POWELL. Thank you. President George.

MR. KAPLAN. Chair Powell, I'm back on, in case you were looking for me.

CHAIR POWELL. Thank you. President Kaplan, why don't you go ahead then?

Thanks.

MR. KAPLAN. All right. Sorry about that. I got cut off for a moment. So I agree with the objectives as stated of returning to a sustainable level of ample reserves, and I think the other objective I would have in assessing these options is erring on the side of preempting volatility in the future versus reacting to it. I think, in that regard, I prefer the faster approach as outlined, the

bills and a repo facility. And I also agree with the comments that if we wanted to go from \$60 billion to, say, \$80 billion per month by buying an extra \$15 billion to \$20 billion per month of short coupon securities, if that's our judgment of what the market could tolerate, I would also be supportive of that. I would not be supportive, though, of going further than that, or I would be buying bonds.

In terms of the public's perception, I don't personally think that if we're buying bills and only short coupon securities, I don't know that the public is going to be able to see much difference between \$30 billion and \$60 billion a month or even \$60 billion and \$80 billion a month, and so I would rather back a solution that is more likely to address this issue and preempt future volatility. So I would want to give the staff latitude to do that. Obviously, the communication is going to have to emphasize that this is not QE, that it's a technical adjustment, but I actually believe we'll be able to do that. And I like bill purchases and relying more heavily on those, for all the reasons others have said because it's much more likely to spread reserves through the system.

In terms of the announcement, I would strongly favor doing an announcement well before the FOMC meeting, as others have suggested. I think that would de-link it from monetary policy. It's more consistent with it being a technical adjustment, and it allows us also to start making purchases sooner. I'm glad that Governor Quarles is talking about looking at the regulatory incentives for owning reserves versus Treasury securities, and I think, in the longer run, that would be a good exercise to do. It obviously doesn't address this situation now.

Lastly, as many have said, I think we would be very well served to get this issue off the table. I notice in my own meetings with the public that they are starting to raise broader concerns about liquidity at a time when the economic outlook is more uncertain and we're more

concerned that we're dealing with a slowdown. I think we would be very well served to get this issue off to the side. But, by and large, I like this approach, and I'd be supportive of taking actions, again, that err on the side of preempting future volatility and, if necessary, overdoing this a bit rather than underdoing it. Thank you, Mr. Chair.

CHAIR POWELL. Thank you. President George.

MS. GEORGE. Thank you, Mr. Chairman. I'll be brief here, because I agree with the general consensus—that is, we should begin right away with our purchases of Treasury bills. I think that's the best short-term solution to getting our level of reserves back up.

I also believe, over the longer term, we should clarify what's happening with some of these structural issues. I think the fact that a liquidity regulation was aimed to enhance market functioning—an important role of intermediation during times of stress—means something isn't calibrated right there. So I'm glad Governor Quarles has raised that issue as something that needs to be addressed.

And then, finally, with our communication, I would announce quickly and act quickly to affirm our operational framework for ample reserves and our objectives of rate control. I think the sooner we do that, we can put many of the questions and issues behind us about whether there are other things going on. And I was concerned about QE-like issues if we emphasize that we are really supporting the decisions that we made earlier. Thank you.

CHAIR POWELL. Thank you. President Bostic.

MR. BOSTIC. I had the wrong time as well. Hold on for one second.

CHAIR POWELL. Sorry.

MR. BOSTIC. No worries.

CHAIR POWELL. I think we shuffled the cards here.

MR. BOSTIC. Yes. Well, you've got to go with the flow. Good morning, everyone. Thank you to the staff for the memo. It was very clear, and it really laid out the issues in a pretty straightforward way. I have to say, the overarching issue that stuck in my mind was the tremendous amount of uncertainty that remains regarding the dynamics that drove this, and that really shapes how I think about the potential actions in moving forward and how we should consider these policies.

Let me start with the two options that were offered as the potential strategies. The first: rapid Treasury purchases covered with supplemental term repos, I do believe this offers a pathway for achieving our coming close to the September benchmark. And I have confidence that this can be executed, but, like others, I am concerned about the signal that this could potentially send. It could trigger several lines of thought that could be potentially destabilizing for the economy. As some have noted—as pretty much everyone has noted—it could lead people to think that we are engaging in QE again, because of some concerns that the economy is weaker than the top-line numbers might suggest. And this concern is credible, I think, because the action that we will do will be at the scale comparable to what we did in QE, and it would last for several months.

A second possibility is that some could see this as analogous to the financial market breakdowns that preceded the Great Recession, and neither of these would be good, and so the strategy would rely heavily on our communications to make the point that this is not actually what's driving things. I came into the discussion feeling pretty nervous about this. I think that the discussion today has made me a little more confident that we can accomplish this. I do believe that the speed at which this volatility emerged gives us a real opportunity to say, "Look,

this is responding to a particular circumstance, and there are really technical issues we can resolve as we continue to learn about the dynamics.”

I would just say that the second strategy leaves me really concerned, because it relies heavily on the consistent engagement of primary dealers. The memos and the discussion today have made it pretty clear that support from this group is not rock solid, and so a strategy that relies on them gives me some pause.

So, given all that, I would “lean toward,” and support, faster-paced Treasury security purchases and moving more dramatically. And I would echo a point that was made by a number of people: Let’s figure out how we get to the desired level as fast as possible. So the approach of Rosengren, Daly, and others to try to front-load this really has some appeal to me. I think the longer this goes, the larger the possibility that there is some confusion or conflicting narratives that emerge.

I would share the concern or the question about the focus on a September benchmark as a focal point for a level of reserves that we should move forward. As I was reading the memos, I really question why we would be comfortable there, particularly because the events that triggered the current crisis were modest and were fully predictable. And so the question I ask is, what would happen if something larger happens or if something unpredicted happens? If we’re just at September, I fear that we could be right back in this circus. So, to be safe, I think that there’s some value in having additional buffer above and beyond that September level, and I think this would be prudent. And that comes back to the uncertainty. There is still a lot that we have to learn, and so as we’re learning, I think there would be value in us not trying to be so precise in identifying a level.

And so, let me just stop there. On the communication strategy, like everyone else, I do think that sooner is going to be better than later for many of the arguments expressed. I do think that an important part of this communication should focus on the real uncertainty that exists in the marketplace, and that we are learning as we go. This is a new space for us, and so this should not be expected to be the last adjustment that we make but rather an evolution toward a deeper understanding of the market and getting us to an optimal policy stance. Thank you, Mr. Chair.

CHAIR POWELL. Thank you. President Mester.

MS. MESTER. Thank you, Mr. Chair. So it's great to be in the majority again.

[Laughter] I am fully supportive of moving—

MS. MESTER. Thank you. Look, to my mind, controlling the funds rate and being able to make sure that we don't have spikes in these money market rates is the highest priority. And also demonstrating that we have that control is very important, as President Rosengren said. Controlling the narrative is in our hands here, and we have an opportunity to do that. This is very consistent with what Vice Chair Williams said. We said we were going to be looking at how market interest rates were going and how reserves were being distributed across the system, and that's what we've been doing. And what we've learned is that perhaps we need a higher level of reserves than we thought, and maybe we need higher buffers than we thought, given that events can actually change the desired levels that any one bank will have. I just would point out that the distributional issues mean that there is a lot of uncertainty about what the aggregate level of reserves is going to be needed, and that's something else that we learned. So I do think that we have to take some actions here even if we'd like banks to be doing it for us, and the actions laid out seem to be appropriate ones.

I would favor getting the level up sooner rather than later, so I would support purchasing the purchase of short-term Treasury securities. And I also would support probably going a little bit higher, because the underrun in April next year suggests that maybe we should get levels up sooner rather than later and higher than what's suggested in the memos.

In terms of communications, I would communicate as soon as we feasibly can. I see no reason to wait. I think this gives us the best chance to separate this from a decision on monetary policy if we do it well ahead of the October meeting. I'm not concerned with engendering a sense of urgency, as the memo pointed out, as one of the reasons to go later. I already think the markets have a sense of urgency here, and going in and addressing it, I think, could actually be calming to the markets and reassuring to the markets. I don't think it would actually be viewed badly. And it also means we'd be able to control the narrative.

In terms of communicating the level—the September level or a dollar level—I would be circumspect, because we don't really know how much we're going to be needing to do. So I think the message has got to be, "We've noticed the volatility, we want to address it, and this is a plan for addressing it. And we will continue to monitor things and go back in as needed to make sure that we are supplying the level of reserves that's necessary." And if I were doing the communications, I would actually do a statement, but I also would put out FAQs, because you can then take all the questions that you think you're going to be getting and write them out, so that people will be able to understand. Thanks.

CHAIR POWELL. Thank you. Governor Bowman.

MS. BOWMAN. Thank you, Chair Powell. I'd also like to thank the staff for the work that they have done to help us prepare for the discussion and the many discussions I have had with our staff to better understand the situation. In the short time that I've been on the

Committee, I have come to understand that there are regular periods when we experience issues related to patterns in the market, like quarterly tax payments, debt ceiling discussions, et cetera. Until last month, we had seen some volatility surrounding these events. But nothing compared with what we saw in September.

Since then, we've learned a few things. First, I think that we are much closer than I thought to the minimum level of reserves sufficient to maintain control over the federal funds rate. Second, we have learned that repo rates can move significantly in response to the lack of supply and an increased demand for overnight funding, and that this was a surprise to both us and to the markets. And we saw those rates influence other short-term funding markets. To me, this indicates that we need to try to understand and narrow down the potential causes, whether it was the level of the balance sheet, the result of post-crisis regulation as Governor Quarles and Presidents Harker and Bullard have described, or something else entirely.

In any case, it appears that we have come close to the lowest comfortable level of reserves, and, therefore, it's wise to consider increasing the size of our balance sheet before year-end. So today, with the limited information available, if asked to choose among the options that the staff proposed, my preference would be for the second option, which combines the slower pace of Treasury bill purchases with increased overnight and term repo operations. This option seems more straightforward to communicate, and it minimizes the risk that our actions are disruptive to the short-term Treasury securities markets. Further, the smaller monthly purchases may be less likely to be linked with quantitative easing if we can communicate clearly.

Beyond these operations, for the longer term, I think we should consider the advanced scheduling of overnight and term repo market operations to be held on three dates or during time frames when we anticipate these markets will face pressures because of quarterly tax filings or

calendar year-end dates. Because we know when these predictable pressures occur, it may reassure markets to know that we stand ready to conduct operations as needed, independent of the size of our balance sheet. If we find we don't need them, we could phase them out over time.

As many have also discussed, it would also be helpful for us to reconsider what we think the minimum comfortable level of reserves is, incorporating our experiences of the past few weeks into the staff's ongoing research in this area. I would prefer a level that could be sustained without frequent discussion points or interventions, if possible. I'd also like to see further analysis from the staff on whether these events were partly the result of changes to financial supervision or regulation. Thank you, Mr. Chair.

CHAIR POWELL. Thank you. President Kashkari.

MR. KASHKARI. Thank you, Mr. Chairman. Like many others, I support the faster plan on Lorie's chart, graph 7. Like many others, I worry that it's a little too conservative, and that the cost of being too conservative far outweighs the cost of being more aggressive. And so I would err on the side of being less specific about the level of reserves and erring on the side that we don't run into some kind of problem at year-end, just so that we do this one and done, and that we bridge ourselves to whatever our long-term solution is.

I think that I am the outlier in being less in favor of a midmeeting announcement. I guess my reaction is, that seems highly unusual. I don't know the last time the Committee put out a formal statement between meetings. I imagine the staff knows. I don't know the answer to that. That feels like a strategy to maximize attention on this. And if we're trying to signal that this is a technical procedure, just for monetary policy implementation, in my mind it does the opposite of that. It's calling maximum attention to it.

Is there a way to deemphasize it? Maybe the Chair, in his remarks, could mention what the plan is. Or, I don't know what the monetary policy plan is in October, but if we're not adjusting the federal funds rate, it would strike me that we could announce this concurrent with our normal FOMC meeting, and this would be more technical in nature, rather than maximizing the spotlight on any notion that we're doing something profound here. The Committee hasn't done intermeeting in a very, very long time. Again, obviously, I'm the only person who appears to have that view, so there is the wisdom of crowds.

I'll turn to the ceiling facility. I am in favor of serious consideration of a ceiling facility. I think one thing that I have learned in this is that the discount window is hopelessly stigmatized. I thought that the stigma was because we had a penalty rate, but, boy, markets just blew through the penalty rate and didn't even look at it. And so I think we do need some type of ceiling facility. But this comes back to, what do we mean by "ample reserves" or "abundant reserves"? If we design the system so that the ceiling facility is never going to be used, it will be stigmatized. So somehow we need to have a very robust conversation about how frequently we expect that ceiling facility to be utilized. And it can't be never, because then we're going to be right back where we are right now. We need to accommodate the fact that it will be regularly utilized, so that people do not view that as a sign of weakness. It's just a sign of regular monetary policy implementation. So we may end up in ample but not abundant reserves—we'll have to have a robust discussion about that. And then, when we design it, my view would be as wide a range of counterparties as we can get comfortable with, so that we don't have this disintermediation problem. Thank you, Mr. Chair.

CHAIR POWELL. Thank you. Governor Brainard.

MS. BRAINARD. Thank you, Mr. Chair. My own thinking on balance sheet principles has been pretty consistent over the past year, and it's just governed by a few very basic principles. First, our primary goal has to be to maintain good control of the policy rate and effective transmission to other money markets in the financial system. Our secondary goal should be a parsimonious operating framework that accommodates swings in nonreserve liabilities and other changes in supplies and demands without necessitating frequent, large open market operations or risking spikes in the funds rate. And, third, we should aim for simplicity and clarity to the greatest extent possible to separate these technical execution issues from communications about the stance of monetary policy.

Those principles led me in November and December of last year to favor ensuring, I think, what is really abundant reserves such that we can be confident that the amount of reserves is more than adequate to meet demand and, thus, provide effective interest rate control. I don't believe that there are any merits to probing for the lowest level of reserves, particularly in a late-cycle environment when markets are fragile and prone to volatility and misinterpretation. And this is simply repeating, I think, what I said earlier. The process of probing for the kink between the flat and steep part of the demand curve or for the lowest efficient level of reserves is likely to be fraught. It will necessarily entail spikes in federal funds rate volatility. New operations would be needed to contain that volatility, and that is, I think, what we've been observing over the past few weeks.

So based on that, I do prefer—I guess, would like to see an option 1 prime, perhaps option 1 as amended by Presidents Rosengren, Daly, Evans, Kaplan. I think it's a long list now. It would be good to see what a more aggressive rebuilding strategy would look like, perhaps going beyond bills to short coupon securities. Maybe there are risks there, so I would like to see

more analysis before we go there. But I think that we want to have a framework response that has the quality that I think Rob Kaplan raised at the September FOMC meeting of being proactive and creating a framework rather than being reactive to market developments and relying for a prolonged period on *ad hoc* operations. So option 2, I think, could be justified, but I do worry that it looks like we will be relying to a greater extent on more reactive, *ad hoc* operations than an abundant-reserves or an ample-reserves regime would seem to imply.

With regard to communications, I think I will make President Kashkari slightly less of an outlier. I had similar kind of instincts when I first saw these options, mostly because I worry that, first of all, there's not a huge gap between when we would be able to make this decision and when we have our FOMC meeting. But the perception of going out of cycle might put this more in the realm of looking like we're responding to some kind of financial-stability concerns or that this really is an emergency. And, in fact, this just goes to the core of our execution of monetary policy. I think it's an opportunity for the FOMC, in regular-cycle communications, to say, "This is what an ample-reserves regime looks like, and that is why we're building up the level of reserves—to amply satisfy demand."

So, also, just in terms of—it is a difficult communication. I, on balance, would prefer to see the Chair be able to incorporate it into a press conference statement, because that allows us to distinguish between what is an execution decision and a stance-of-policy decision. I do agree with those who have said it does need to be a separate statement.

And then, finally, I think I agree with President Bostic. I found the September reference point a little confusing until Governor Clarida explained the connection to previous communications. To me, it would have seemed more natural to say, "We actually have gone out and offered operations, and the level of demand is clearly at the upper end of the range of

operations that we've offered, and that's why we're building up and adding a buffer on top of that." But I leave it to others to think about a better way to explain it.

So let me just conclude by saying "Thank you" to Vice Chair Williams and to the staff across the System. I know this has been a real sprint, and I appreciate all of the work that's been done. Thank you.

CHAIR POWELL. Thank you. And thank you for an exceptionally good set of comments from everybody. There is, as always, a healthy diversity, but I think there's also a consensus that I see in that on some fundamental aspects of a plan. And I'll come back to that at the end. Let me offer a couple of comments in the meantime.

In January, we made a decision to continue what we called an "ample-reserves framework," and we defined that as meaning that we wouldn't be going in and out of the market with open market operations with any frequency. And we thought about that for years, and there were risks to making that decision. But we made it, and we explained it clearly, and it was well accepted. I think all of the risk now is to the credibility of that decision. We now need to follow through on that decision robustly, and that's where the risk is now. It's not on the other side, as it might have been before we made the decision. So that means, if you think about what the right level of reserves is—I think this is something we need to fine-tune a little bit, but the idea of early September may not be quite right. The idea of current operations, maybe, plus a buffer, as Lael just suggested, something like that. I think the market will need a focal point, and language like "at least," "a bit above," "learning as we go," "uncertainty"—stressing all of those things are healthy. But I do think we need something like that. And, of course, let's agree that we really don't know. We really don't know.

I have to say, I'm surprised—I doubt that Lorie and colleagues in New York would be as surprised as I am—by the amount of volatility in demand for reserves. It seems that, whatever you think the equilibrium level is, the volatility around that number is much faster and much bigger than I guess I had intuited. So that means we're going to be using a lot of language that's not so much about a level as about the framework and that sort of thing.

It's also worth remembering, there's a long list of things that can affect—in a downward direction—the demand for reserves, and that includes daylight overdrafts, it includes changes to our Payment System Risk (PSR) policy, it includes internal liquidity stress tests, it includes the issue of Treasuries and reserves and the related issue of having a standing repo facility. Also, the other liabilities—Lorie mentioned this at the beginning, the foreign repo pool and the Treasury General Account (TGA). The TGA we think of as—I mean, it's so big. We think of it as not part of this—because it's really the Treasury's call and all that. But it's so big and it can move so much. I think it's worth thinking about whether there aren't ways to somehow manage its outsized effects on reserves. So there's a lot that can be going on in the meantime. None of it is going to help us by year-end, or not much of it. So I think the actual answer may be quite different than what we think it is now, which again stresses the need for not being too precise.

So why go before the meeting? I think this is a question that we have all been thinking about a lot, and I think the pros and cons were articulated very well by various people. I'll give you the three reasons for going before the meeting. First, it really creates a separation from the monetary policy decision we make one way or the other at the end of October. Second, as John pointed out, right now we're right where we need to be with markets. If we don't do anything for three and a half weeks—25 days or 26 days—I suspect there will be, well before that, a lot of sentiment, like, “Where are they?” So pretty soon we'll be “behind the curve.” The third thing

is maybe a little less significant. That is, we can start purchases once we announce this, so we can get going. We've got a lot of wood to chop here. Those are the three reasons.

As both Lael and Neel pointed out, the issue is, doing something off-cycle does draw attention to it. And there, I think, the communication, if you listened to what Thomas said—and this isn't in what was handed out, but what he said was, "One approach would be to state that you will be conducting outright purchases and term repo operations as necessary to achieve and maintain your desired level of reserves . . . in addition, you will continue to offer overnight repo operations to mitigate the risk of money market pressures that could adversely affect the implementation of monetary policy. Specific amounts for the pace of outright purchases and the size and other terms of term and overnight repo operations could then be announced by the Desk and adjusted over time." So there's a little bit of a separation of the FOMC decision with the implementation note, and I think that may help break the link to QE.

We're going to have to just "repetitively repeat"—that seems to be the phrase of the day—that it's not QE, and I think we can make that sale. So waiting has its costs, too. And, I mean, I was on that team until the past couple of days, and now I think I've persuaded myself that—but anyway, I think we can manage that. So, in the course of this meeting, I didn't—of course, we didn't know how this was going to go, so I actually think there's a basis to move forward with a plan that we would draw up and then send out to people early next week. We have a scheduled call, another FOMC call, next Friday, which we are happy to do. If people would rather not do that and do it by notation vote, we could do that. I sort of sense it would be better to have the second call. So, after this, I'll open it up for questions and comments on that.

It would be something, too, I think, that I would probably not leave to Q&A in my Tuesday speech. I think I would drop a couple of pages in at the end of the speech, which would

be carefully written to be assuring but also to lay out that we have a plan, it has certain elements, and we're pleased with our progress. And that would be picked up without delivering the whole load.

I think it could foreshadow the decision that we then make on Friday, again, drawing away from the undesirable shock-and-awe factor a little bit, I would hope. The plan would be some pace of asset purchases that covers the consensus of the Committee. There were "slowers," there were "faster pluses," but I think we'll be somewhere in the middle, maybe, with the regular number 7. So I'll put that out as a possible way to proceed, And then why don't we—Thomas, do you have something that you wanted to add to that? Or no?

MR. LAUBACH. No.

CHAIR POWELL. Okay. So I'll stop there and offer the opportunity for discussion and comment. Vice Chair Williams.

VICE CHAIR WILLIAMS. Thank you. This has been a really helpful discussion. I want to, again, thank the teams here—Washington, the Board—who worked tirelessly. They now have heard that they are going to be working tirelessly a little bit longer, but I think this discussion has been really helpful in our thinking and understanding further all of these issues in a constructive way.

I will tell you, the staff has not only been working tirelessly on developing these plans, working through all of these, they've also been tirelessly working on turning me into a true New Yorker. So I have here my statement of where my loyalties lie. [Laughter] And, by the way, President Daly, it's really driven by my, shall we say, "lack of love" for the Dodgers, if we get to that point.

The last thing I just want to add is, you know, we've talked about the ambiguity and uncertainty, which is absolutely right. At the same time, as best as we can, we want to convey the message that we have this plan that gets us to what I would call a "true ample-reserves framework" by April of next year. And I think that does require us, in some way, to say what "good" looked like. And what "good" looked like is, I think, early September or earlier than that when we didn't see interest rates spiking all over or these signs of stress. So there's got to be a way for us to communicate what "good" looks like here is, basically, the administered rates doing most of the work, that any open market operations would either be a standing facility or infrequent use of those, and really just have a system that is a very coherent strategy. And that's, I think, the important part of this communication beyond what we are going to do over the next few weeks. Thank you.

CHAIR POWELL. Other comments or—

MR. BARKIN. Jay, this is Tom, and I think I'm speaking for Eric. We're more than comfortable with the notational vote. I'm not sure we need another long meeting to debate a simple plan. But maybe others would think differently.

MR. BOSTIC. I agree.

MS. DALY. I'm also for that. I don't think I need to have more discussions. This was a very helpful discussion.

CHAIR POWELL. Anyone dying to have the call? [Laughter]

MS. MESTER. I'm great with a notation vote as well.

CHAIR POWELL. Okay. Our feelings are not hurt, don't worry. [Laughter]

MR. EVANS. Wait. Could I just ask—maybe I wasn't paying enough attention. The notation vote is going to be—what's likely to be put in front of us?

CHAIR POWELL. So it'll be a plan.

MR. EVANS. I'm fine with a notation vote.

CHAIR POWELL. We're going to put a plan together and probably be in discussion with people during the course of doing that. And it'll have asset purchases, it'll have the timing of them, it'll have—Thomas, do you want to flesh that out?

MR. LAUBACH. So, basically, it would be a short FOMC statement together with a revised directive. And, again, the FOMC statement—that's going to be the art here, right? How do you, with finesse, take into account—for example—the issues that you raised about giving some reference points to markets, without locking in too much into one? How to explain these things as, in some sense, making up for a certain level. So that's basically what we'll be working on, and we would send something as soon as possible.

CHAIR POWELL. Yes, send it out for comment and then later for a vote. Let me come back to the timing issue that Neel and Lael raised. Of course, we don't know what we're going to do on monetary policy at the October meeting, but if you're in a situation in which you're cutting and you're also announcing this, I don't know how the headline doesn't be "Fed Cuts Rates, Restarts Asset Purchases." For all the talking you do, I just think it would be so hard to break that link, because there's just too much news. You know, this is a coin flipper. It's a very close call. Anyway, that's what I worry about.

Also, I think, after I speak—and John will speak, too, I guess—they'll know it's coming, and they may be speculating that it might be coming sooner, and then it should reduce the drama of the thing if it's already been heavily foreshadowed. Any other comments or questions? [No response] So everybody is good with this? President Bullard.

MR. BULLARD. Yes, Mr. Chair. A lot of people wanted to go sooner or front-load or something like that. So probably getting approval from the Committee sooner rather than later and separating it more from the FOMC meeting is probably a good idea. I don't know if we could get a midweek vote or something. Not that I want to press people too hard, but we already had the discussion here, and probably a proposal that takes into account some of the comments here could be approved relatively rapidly, maybe next—midweek or something?

CHAIR POWELL. You know, I want to get this right. I mean, October 11 is before people are expecting, and if we could just—it's only a week. I'd like to keep that if we could. I want to get this done carefully—there will be time for a little bit of back-and-forth with you guys, with all of us, and so if I can hold to that. A couple of days shouldn't matter that much. I appreciate your suggestion, Jim.

MR. BULLARD. So does that mean the proposal would go out at a week from now, or does that mean that the announcement would be made?

CHAIR POWELL. Announcement.

MR. BULLARD. Announcement. So we'd have a week to look at it and approve.

CHAIR POWELL. Well, you won't have a full week. You'll have—

MR. BULLARD. No, but you'd have next week to circulate.

CHAIR POWELL. Yes. I think we'll be shooting paper at you—what? I won't make these promises. [Laughter]

MR. LAUBACH. Monday?

CHAIR POWELL. Sure, it will. Monday. [Laughter] Monday. And then you'll be reacting to it, and we'll be coming together around something and voting on it and announcing it on Friday.

MR. LAUBACH. So, like we normally do with the A-B-Cs, right? We send you a draft and there would be an opportunity to comment?

CHAIR POWELL. Neel.

MR. KASHKARI. I appreciate your comments about previewing it so that it dials down the intensity of this intermeeting statement. I'm just curious—Thomas or Jim or anybody, off the top of your head, do you remember the last time the Committee put out an intermeeting statement? And what were the circumstances?

MR. LAUBACH. Yes. In May 2010, there was an announcement in the context of swap lines. The last time that you announced an intermeeting decision in terms of the funds rate was October 2008. That was the coordinated policy rate cut across a number of central banks.

MR. KASHKARI. Okay. Thank you.

CHAIR POWELL. President Evans.

MR. EVANS. Okay. So just to clarify: The notation vote on Friday could be on a proposal along the lines of the reserve projections with faster bill purchases? Is that what we're talking about—\$60 billion per month could be a possibility?

CHAIR POWELL. Let us take away the notes of what everybody said, but something in line with that.

MR. EVANS. Okay.

CHAIR POWELL. But I think we're going to be thinking about all of the things people said here today and trying to incorporate—

MR. EVANS. Okay—as opposed to just sort of a holding statement in which the FOMC has indicated that we intend to be doing more and provides some guidance on that and allows

some kinds of actions, but we'd actually start running the program, which is what I favor. I just wanted to try to clarify that.

CHAIR POWELL. Well, let me be clear. We'll make a decision, and we'll announce it, but as I mentioned, the part I read out of Thomas's statement suggests that the Desk will be making the specific numerical announcements—kind of thing. Do you want to comment on that, Thomas?

MR. LAUBACH. That's one option for you. It would seem to me that there are some advantages, as I think many of you mentioned you would like to emphasize the need to remain flexible and to make adjustments as you learn more. You know, if the Committee statement outlines the high-level intention, then the specific numbers could be in the Desk statement and thereby easier to adjust, if that was appropriate. That might be an attractive way to go.

CHAIR POWELL. We'll make a proposal to you on that. So this meeting, of course, is a matter of public record, but not until we release the minutes of it, along with the October meeting. Just making sure everyone understands that.

In terms of laying it out, I'm going to lay it out, I guess, in the context of the speech, and then I think people should be careful to stick with that or stay away from it—stick with the basic talking points on it if you're speaking next week, as many will be, and stick to the message, but also stick to a very basic form of the message, I think, if I could suggest that.

MS. BRAINARD. Can I just make one suggestion in that regard? It would be beneficial for either the Desk or Jim to circulate talking points or a Q&A, which everybody can use, because I think in this intermeeting period there has been very little guidance. And so, you know, it's better for consistency if you could tell us every day or every few days what the standing line is, I think.

CHAIR POWELL. I couldn't agree more. And also the idea of FAQs is just great—I think President Mester may have said that. But I think we can post those things and have all the answers there. That's a terrific idea.

MS. MESTER. Chair, just FYI—I have an interview this afternoon on CNBC, but I will stay away from this. I'm sure there's a lot of other things to talk about, too.

CHAIR POWELL. Yes. Okay. So that sounds like a plan to me. We'll be in touch. Thanks, everybody. A really terrific meeting. Thanks for your comments.

END OF MEETING