

## THE FEDERAL RESERVE SYSTEM

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**Date:** October 14, 2016  
**To:** Federal Open Market Committee  
**From:** Thomas Laubach and Simon Potter, on behalf of the Long-Run Framework Executive Committee  
**Subject:** Framework Memos for the Long-Run Framework Project

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Attached are two memos that consider a broad range of issues regarding monetary policy implementation frameworks. The first memo, “Interest Rate Targets and Operating Regimes,” covers issues related to the choice of the policy rate, as well as the range of tools and facilities available to implement policy, and the amount of excess reserves in the banking system. The second memo, “Balance Sheet Considerations for the Federal Reserve’s Long-Run Framework,” covers issues related to the balance sheet, such as how it affects financial conditions and financial stability, as well as considerations for using active balance sheet policies away from the effective lower bound (ELB). These two memos, along with a number of background memos that have been distributed to Research Directors in recent weeks, reflect the work of the Interest Rate Targets and Operating Regimes workgroup and Balance Sheet workgroup of the Long-Run Framework project.<sup>1</sup>

Staff will provide short briefings on the two attached memos at the upcoming FOMC meeting. Participants will have an opportunity to ask questions and to provide comments (not a full go-round). If you would like to comment at the meeting, it would be helpful if you would address some or all of the questions listed at the end of this memo. In the remainder of this note, we highlight several broad themes on monetary policy implementation frameworks.

- *Interest rate control and transmission of monetary policy to broader financial conditions can be achieved under different choices for the policy rate and operating regime.*

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<sup>1</sup> To maintain focus, options that would require amending the Federal Reserve Act or actions authorized under 13(3) were out of scope for this project. Broader strategic issues on monetary policy, such as adjusting the inflation target or shifting focus to an alternative nominal anchor, were also taken as out of scope.

The Federal Reserve has the tools to steer a number of potential policy rates that would be expected to effectively communicate and transmit the stance of monetary policy. The options include market rates, such as a secured rate (e.g. a repo rate) or an unsecured rate (e.g. the fed funds rate or overnight bank funding rate), or administered rates (e.g. the IOER rate or ON RRP offering rate). Each of these could be effective, but would affect choices about the operating regime (OR). Relevant considerations would include whether to operate on the flat portion of the demand curve for reserves, where excess reserves are relatively abundant, or on the steep portion, where excess reserves are scarce. Other aspects of the OR, including reserve requirements, ceiling and floor facilities, as well as the counterparties with whom to interact, would also need to be structured in a way to support the policy rate.

Each of these policy rate options could be maintained in situations in which the FOMC might choose to push short-term rates to or below zero, albeit requiring changes in the OR for some policy rates. In addition, money markets would be expected to remain active and well integrated under the different policy rates and ORs, though only regimes with some scarcity of excess reserves would likely promote active interbank trading. Other considerations include governance issues regarding the decision-making body that has authority to set administered rates, as well as how the OR may support balance sheet policies.

- *Some frameworks offer the flexibility to maintain control over the level of short-term interest rates independent of the size of the balance sheet and quantity of reserves.*

Policymakers may want scope to adjust short-term interest rates independently of any decisions about the balance sheet. The current OR is one such example offering this flexibility, as it has been effective at achieving short-term interest rate control with a large balance sheet and a high level of excess reserves. Other approaches, however, can also provide this flexibility. For example, voluntary reserve targets can theoretically bring reserve demand into line with supply, even with a large balance sheet and high levels of total reserves. Under this approach, with excess reserves then scarce, traditional tools focused on managing the quantity of excess reserves can be effective at targeting the funds rate.

- *There may be advantages of having separate lending facilities for different types of liquidity provision, as well as a broad counterparty framework.*

Liquidity provision may support interest rate control, be provided broadly under conditions when markets are not functioning well or provide backstop lending to individual institutions. Combining these roles in a single facility, as in the case of the discount window, may result in liquidity provision being associated with stigma regardless of the purpose. As a result, separate lending facilities may be more effective at addressing different types of liquidity needs. A relevant consideration is how tightly any such facilities are integrated into the OR. For example, the discount window and swap lines are “integrated” into the current OR – that is, they are continuously available as part of monetary policy implementation or as liquidity backstop facilities. Still, tradeoffs exist, as more integrated facilities may foster more moral hazard compared to other approaches. Alternatively, tools could be less integrated and made available under some broad pre-announced conditions.

Another relevant issue is the breadth of the counterparty framework. A broad set of counterparties has greater reach, so may have advantages in terms of transmitting monetary policy through the financial system, particularly in times of market stress. Though, certain tradeoffs would need to be considered. A broad set may result in market distortions, as well as greater operational burdens and complexity. Alternatively, a small number of counterparties can raise political economy issues, especially if the designation is viewed as conferring special status.

- *The ability to effectively respond to an ELB episode does not create sharp distinctions between operating regimes, but will require operational readiness if policymakers want to conduct asset purchases.*

The frameworks considered are adaptable to conditions at the ELB, as there are no particular issues posed by the ELB around the choice of the policy rate or OR. For example, if the implementation framework were operating on the flat part of the demand curve for reserves, as it is now, few adjustments would be needed in order to implement asset purchases or negative rates in the event of a return to the ELB. If, on the other hand, the implementation

framework was operating on the steep portion of the demand curve, more adjustments would likely be needed. Either the reserve effects of asset purchases would need to be sterilized or the OR could transition to a floor system, as was done during the financial crisis.

The ability to effectively respond to an ELB episode will also depend on the degree of operational readiness available to support some operations, such as large-scale asset purchases. If purchases are reserved only for times when the ELB binds, maintaining personnel and operational readiness, perhaps via small scale operations, could be useful.

- *In recent years, balance sheet actions taken when short-term policy rates were constrained by the ELB eased financial conditions and helped improve macroeconomic outcomes, though whether such actions would be as beneficial away from the ELB is less clear.*

Balance sheet policies affect financial conditions through a number of channels. Taken together, a range of empirical studies indicate that when monetary policy is constrained by the ELB, asset purchases lower longer-term interest rates and ease financial conditions. Estimates suggest the magnitudes are significant enough to alter macroeconomic outcomes.

Away from the ELB, balance sheet policies could also have effects through different channels than short-term interest rates and thus, be viewed as an additional tool for monetary policy even in normal times. However, the costs and benefits of using both active balance sheet policy and adjustments in the policy rate away from the ELB are less clear. For example, a larger balance sheet that provides additional stimulus may create conditions that support an increase in the equilibrium real rate and thereby, reduce the probability of returning to the ELB. Alternatively, if multiple tools are available, some approaches advocate using the tool associated with the least uncertainty to the fullest extent (e.g. short-term interest rate policy) before turning to the one with greater uncertainty (e.g. balance sheet policy). This suggests turning to active balance sheet policy only when the ELB is binding. Also, if asset purchases lose their efficacy as the Fed's holdings increase, then keeping the balance sheet as small as possible in normal times could provide scope to use purchases when they may be most effective and needed, such as at the ELB.

- *Certain balance sheet policies may support financial stability goals and promote efficient and resilient payments systems.*

In times of market stress, asset purchases can be used to support valuations, liquidity and market functioning. Outside of periods of stress, balance sheet policies may also potentially enhance financial stability. For example, some balance sheet actions may affect the shape of the yield curve in a way that mitigates excessive liquidity and maturity transformation. Also, adjustments to MBS holdings to “lean against the wind” in the housing market may be beneficial, especially if the housing sector is viewed as an important channel affecting financial stability. Some have also suggested that by expanding the supply of reserves and the use of ON RRP, the Federal Reserve can increase the supply of short-term, safe, highly liquid assets and crowd out the provision of “private” money-like assets.

In terms of the payments system, frameworks operating with higher levels of reserve balances facilitate settlement earlier in the day, which helps to promote an efficient and resilient payments system. However, payments efficiency could be supported in regimes with lower levels of reserve balances through the provision of collateralized daylight credit, as under the Board’s existing payment system risk policies.

- *The monetary policy implementation framework has implications for net revenue of the federal government and may raise important political economy considerations.*

The Federal Reserve’s balance sheet has implications for net revenue from the perspective of the consolidated government balance sheet. Net revenue increases along with the size of the balance sheet, provided the yield on securities held by the Fed carried a positive premium relative to the expected path of the interest rate paid on reserves at the time of acquisition.

As the balance sheet increases, however, the Federal Reserve’s interest-bearing liabilities also increase. If policy rates rise, remittances are likely to decrease and the likelihood of the Federal Reserve recording a deferred asset increases. Negative income, carrying a deferred asset, and potentially realized capital losses are not an impediment to implementing monetary policy, but would likely raise important political economy considerations. Similarly, the

interest paid on the large amount of reserves held by banks, a substantial share of which is held by foreign banking organizations, also poses risk from a political economy perspective, particularly if remittances are low or zero. In addition, reserves are in effect financing a portion of federal debt, but they may not be the least expensive source of short-term funding available to the federal government.

## Possible Discussion Questions

1. The memo titled “Interest Rate Targets and Operating Regimes” discussed three broad types of regimes—one focused on targeting an unsecured rate in a floor system with an ample supply of reserves, another focused on targeting an unsecured rate in a corridor system with a relatively scarce supply of reserves, and a third focused on targeting repo rates.
  - What are your views on the key design elements of these regimes, such as the choice of policy rate to be used as a focal point for setting and communicating the stance of policy (an unsecured or secured, or an administered or market rate), the choice among alternative forms of reserve requirements (required, voluntary, or none), and whether to operate on the flat or steep portion of the demand curve for reserves?
2. The memo also discussed possible alternative arrangements for liquidity provision that could help to mitigate stigma and create a more effective ceiling on short-term rates.
  - Do you have any views on changes in the discount window or on other vehicles for liquidity provision, such as the DIRF and FIRF standing facilities, discussed in the memo? What are your views about the appropriate level of readiness for the TAF as a tool to address broad-based funding pressures?
3. The memo titled “Balance Sheet Considerations for the Federal Reserve’s Long-run Framework” discussed a range of issues associated with the long-run size and composition of the Federal Reserve’s balance sheet.
  - What are your views on the appropriate future use of large-scale asset purchases to support macroeconomic objectives? Should such purchases be conducted only after rates have reached the effective lower bound (ELB), or do you see some role for purchases even when short-term rates are well above the ELB? What are your views on the use of the Federal Reserve’s balance sheet to foster financial stability goals? What are your views on the appropriate long-run composition of the balance sheet?