

THE FED'S NEW OPERATING FRAMEWORK: HOW WE GOT HERE AND WHY WE SHOULDN'T STAY

George Selgin

Much talk concerning the Fed lately has to do with its strategy for “normalizing” monetary policy—that is, its plans for reversing unconventional policies it pursued during the last financial crisis and subsequent recovery.

Most people are aware of two of the Fed’s unconventional policies. One consisted of the relatively low interest rate targets it set during the crisis and for some time afterward. The second consisted of several rounds of large-scale asset purchases it engaged in, generally known as “quantitative easing” (QE). But the Fed’s unconventional policies included a third, less well-appreciated component. This was its decision to switch, during October 2008, from its conventional “corridor-type” system for regulating interest rates to a new “floor-type” system. A central bank that uses a corridor-type system influences market interest rates by adding to or subtracting from the available supply of bank reserves. In contrast, one that uses a floor system influences market rates by changing the interest rate it pays on the reserve balances that banks keep with it.

Although the Fed has already begun to undo the more well-known components of its unconventional crisis-era policies by

Cato Journal, Vol. 39, No. 2 (Spring/Summer 2019). Copyright © Cato Institute. All rights reserved.

George Selgin is Director of the Center for Monetary and Financial Alternatives at the Cato Institute.

gradually raising its interest rate target and by allowing its balance sheet to shrink, it has chosen not to revert to a corridor-type operating system. I believe that sticking to the present floor system, instead of switching to a corridor system, is a mistake, for reasons I will summarize later. First, however, I wish to quickly review how the Fed's switch to a floor system came about, and some of the consequences of that switch.

From a Corridor to a Floor System

The Fed's October 2008 switch to a floor system was itself the result of two developments. The first consisted of the new policy it inaugurated that month of paying banks a positive rather than zero interest rate on their Federal Reserve account (a.k.a. "reserve") balances. The second consisted of a substantial increase in the total supply of reserves the Fed supplied to the banking system, originally stemming from the Fed's emergency lending, but eventually continued, on a much larger scale, through its various rounds of QE.

Because the Fed paid interest on both banks' required reserves and their excess reserves (i.e., reserves held above minimum legal requirements), and because it soon set the interest rate it paid on both sorts of reserves above prevailing short-term market interest rates, banks became inclined to hold on to any fresh reserves that came their way, even though that meant holding far more reserves than the law required them to. In contrast, prior to October 2008, banks held only very trivial amounts of excess reserves.

The fact that banks could earn more by holding on to Fed balances than they might by lending them to other banks on the federal funds market meant that interbank lending on that market dried up. It also meant that changes to the available quantity of reserves no longer had any influence on the prevailing fed funds rate. Instead, that rate tended to fall somewhere below the rate of interest on excess reserves, or IOER rate, rising or falling as the Fed raised or lowered its IOER rate. Although the Fed continued to express its intended monetary policy stance in terms of a chosen fed funds rate "target" (eventually changed to a target "range"), its IOER rate had replaced its ability to purchase or sell assets as the tool it relied upon to influence short-term market interest rates and thereby achieve its monetary policy goals. This change marked the Fed's transition from a corridor-type operating system, in which the Fed's rate target was

always somewhere between its (historically zero) IOER rate and its emergency lending rate (the rate at which the Fed lends reserves to institutions lacking in any other source of credit), to a floor system, in which its IOER rate is always at or above its desired rate target.

As I have noted, the Fed's normalization plans thus far include plans for raising interest rates toward a presumably "normal" rate of close to 3 percent, and for shrinking its balance sheet at least to some nontrivial extent, but *not* for reverting to a corridor-type operating system. Indeed, "raising interest rates" in the present context *means* raising the IOER rate, and raising it sufficiently to keep reserves attractive relative to other assets. And that in turn means that the Fed's balance sheet "normalization" must itself be limited, for although that balance sheet can fall substantially from the extraordinary heights it achieved during the recovery, so long as the Fed chooses to maintain a floor system it cannot allow its balance sheet to shrink to the point at which reserves become scarce again. For this reason, the Fed is unlikely to allow its balance sheet to ever fall below \$3 trillion, which is still more than three times its precrisis level. Indeed, the Fed (whose assets, as of this writing, still exceed \$4 trillion) is already mulling the possibility of suspending the unwind it began in October 2017 much sooner than it had planned (Timiraos 2019), so as to avoid any risk of unintentional credit tightening. The Fed's decision to retain a floor system is thus tantamount to a decision to maintain a much larger balance sheet than it might otherwise keep, thereby further limiting its already half-hearted normalization efforts. The "new normal" to which the Fed seems to be headed is, in short, not very normal at all.

Genuine versus Pseudo Normalization

In *Floored!* (Selgin 2018) I make the case for a genuine, rather than pseudo, normalization of Fed policy. Such a genuine normalization requires that the Fed abandon its present floor system of monetary control in favor of a corridor system. This doesn't mean that the Fed should no longer pay interest on bank reserves, much less that it must revert to the particular corridor-type system it relied upon before the crisis. Neither step is, in my opinion, either necessary or desirable. Instead, genuine normalization calls for the Fed to adopt some sort of relatively orthodox corridor system of the sort widely employed by central banks around the world. Such a system would

typically involve a positive interest rate on bank reserves, though one set below rather than above the Fed's overnight rate target, which could still be a fed funds rate target, although it might instead be a secured overnight rate target. Genuine normalization thus requires that the IOER rate be set low enough, relative to other rates, to make banks unwilling to stockpile excess reserves. It requires, at the same time, that the quantity of excess reserves on the Fed's balance sheet be small enough to give at least some banks an incentive to borrow on the fed funds market. In principle, these two changes—one aimed at reducing the demand for excess reserves, the other at reducing their nominal quantity—can be so coordinated as to be consistent with any policy stance the Fed chooses to maintain during the normalization process.

Backward and Forward-Looking Criticisms

But why is such a genuine normalization, with the tricky transition to a corridor system it entails, preferable to the Fed's present, half-hearted alternative? My criticism of the Fed's floor system consists of two components. One is backward looking, while the other is forward looking. The backward-looking criticism has to do with the particular use the Fed made of its floor system during the crisis and recovery. The forward-looking one has to do with what I see as the inherent drawbacks of a floor system. Because my backward-looking criticism of the Fed's floor system itself refers to potential, if not inherent, dangers that a floor system poses, a quick review of this criticism may also help to inform a weighing of the relative merits of a floor system going forward.

Fighting Inflation and Promoting Recession

A closer look at the origins of the Fed's floor system is particularly enlightening in this respect. That system came into being in October 2008, when the Fed secured congressional permission, with the passage of the Emergency Economic Stabilization Act, to immediately start paying interest on bank reserves—as the 2006 Financial Services Regulatory Relief Act would have allowed it to do starting in 2011. The authors of the 2006 Act had themselves never contemplated the possibility that the Fed would employ the new power they granted it to effect a radical change in the Fed's operating system. Instead, their aim was the far more measured

one of allowing banks to earn a modest return on their reserves, particularly on their required reserve balances. Nobody at the time imagined that the law would instead be used to change the way monetary policy was conducted.

But in October 2008, Fed officials were not merely interested in compensating banks for having to hold required reserves. They wanted to make all reserves, including excess reserves, so attractive that banks would hoard them. Why would the Fed want to encourage banks to hang on to reserves, instead of trading them for loans and other assets, just when the U.S. economy was experiencing its deepest contraction since the Great Depression? The answer is that, although we now know that the Great Recession was well underway by October 2008, neither Fed officials nor most other people knew it then. Instead, since April of that year, the Fed's primary concern was inflation. Core inflation had been consistently above the Fed's implicit 2 percent target, while headline inflation was ratcheting higher.

Although those inflation numbers reflected temporary shortages of oil and other commodities, rather than robust spending growth, the Fed was determined to keep a lid on them. Yet the Fed was simultaneously engaged in substantial lending to financial institutions weakened by the still-ongoing decline in real estate prices. Policymakers thus faced a challenge: how to go on aiding a struggling financial industry without promoting inflation. In particular, how could the Fed go on hitting the 2 percent fed funds rate target it had set, and which it regarded as essential for fulfilling its dual mandate, despite all its emergency lending?

For some months the Fed solved the problem by "sterilizing" its emergency loans: for every dollar it lent to this or that financial institution, it sold an equal sum of Treasury bills from its portfolio, thereby keeping its balance sheet and the quantity of bank reserves constant. Come September, however, the Fed no longer had Treasury securities to spare. Then Lehman Brothers failed, triggering a run on AIG, to which the Fed responded with its biggest burst of emergency loans yet. Despite all the havoc, the Fed still hoped to keep the fed funds rate from dropping below 2 percent. That's when it thought about paying interest on reserves.

The idea was simple: if the Fed could not avoid creating fresh reserves, it could make it worthwhile for banks to stockpile fresh reserves that came their way. So it sought, and got, permission to pay

interest on reserves ahead of schedule. It then simply ignored the 2006 Act's stipulation that the interest rate on excess reserves not exceed "the general level of short-term rates," instead setting IOER high enough to make it more profitable for banks to hold on to reserves than to dispose of them by lending to other banks or by acquiring other assets.

This brings me to my main, historical criticism of the Fed's floor system, which is that by switching to that system, the Fed inadvertently contributed to the Great Recession by tightening credit. While Fed officials may have been confused at the time regarding the true state of the U.S. economy, we now know that their anxiety about overstimulating the economy throughout much of 2008, and particularly as late as the fall of 2008, was seriously misplaced. Policymakers were endeavoring to combat inflation when they ought to have been combatting recession. An above-market interest rate on excess reserves, and the floor-based system of monetary control that went hand in hand with it, was their weapon of choice.

From Sterilization to Stimulus

But the story gets even worse. For by November 2008, Fed officials finally came to realize that the U.S. economy was collapsing, and that monetary stimulus was, after all, just what it needed—and badly. So instead of worrying about the unintended, inflationary consequences of unavoidable reserve creation, the Fed began planning an ambitious program of intentional reserve expansion. Although Fed officials spoke of "large-scale asset purchases," everyone else called it "quantitative easing."

Here's the catch: for all their determination to stimulate the U.S. economy, Fed officials were no less determined to stick to their new floor operating system, with its built-in tendency to encourage banks to hoard reserves. Although the Fed did eventually reduce the IOER rate to just 25 basis points, by the time it did so market rates had fallen lower still. Consequently, banks could be expected to respond to the Fed's deliberate program of reserve creation just as they had responded to its incidental reserve creation beforehand—namely, by accumulating that many more excess reserves. In short, the same arrangement that had been put in place to prevent the Fed from stimulating economic activity inadvertently would now tend to prevent it from intentionally stimulating such activity. In testifying

before Congress on this history a few years back (Selgin 2016), I observed that if insanity is indeed doing the same thing over and over again and expecting different results, one has to wonder whether Fed officials at the time were not quite in their right minds.

To defend their planned stimulus, Fed officials had to find some way to explain how expanding the stock of reserves might stimulate economic activity despite not leading to any corresponding increase in either bank lending or broad money stock measures. And so, they and their staff produced several new theories of how QE might work, many of which appealed to the possibility that large-scale Fed purchases of long-term assets might stimulate investment by lowering long-term, rather than short-term, interest rates. That those officials themselves, or some of them at least, found these theories less than fully convincing was made abundantly clear by Ben Bernanke's notorious 2014 quip that "the problem with QE is that it works in practice but not in theory."

But while many agree with the second part of Bernanke's statement, the jury is still out concerning the first part. Although most (though not all) authorities agree that QE succeeded in lowering long-term interest rates, which was its immediate objective, there's only scant evidence that by so doing it also led to substantial increases in spending, inflation, or employment. Allowing for this, it seems reasonable to conclude, in retrospect, that by resorting to a floor system in 2008, the Fed both deepened the recession and hampered its ability to contribute to the recovery.

Why a Floor System Is Still a Bad Idea

That the Fed implemented a floor system at the wrong time, and for the wrong reasons, and that by doing so it limited artificially its capacity to spur recovery from the 2008 crash, does not necessarily mean that it shouldn't keep its floor system in place. In principle, after all, a floor system is capable of keeping monetary policy in line with the Fed's inflation and unemployment objectives. The problems of the past were, at bottom, problems not with the floor system per se but with the Fed's particular IOER rate settings which, being too high, made its policy stance too tight.

But what's past is past. Monetary policy is arguably no longer too tight—and there is no reason why it should be either too tight or too loose going forward. So why shouldn't the Fed stick to its

floor system? That system does have certain obvious advantages. It allows the Fed to make the banking system as liquid as it likes, just by pumping more reserves into it. It also spares the staff at the New York Fed from having to “fine tune” the supply of bank reserves in order to keep the fed funds rate on target or (as is now the case) within the Fed’s announced target range. Achieving a desired level of interest rates is a simple matter of adjusting the IOER rate, and watching other market rates gather around it, like so many moths gathering around a candle.

But a floor system also has serious drawbacks. By encouraging banks to hold excess reserves, it all but ends interbank lending on the unsecured federal funds market. Before the crisis, that market saw about \$200 billion a day in activity; today, despite interim GDP growth, the figure is about a quarter of that amount. Moreover, the remaining activity consists, not of interbank lending, but of lending from government-sponsored enterprises (GSEs), which do not earn interest on balances they keep at the Fed, to banks.

Why does this matter? It matters because by destroying the unsecured interbank loan market, the Fed’s switch to a floor system also destroyed an important—perhaps the most important—venue for interbank monitoring. So long as banks engaged in routine, interbank lending to other banks, they had reason to keep informed about the soundness of prospective bank counterparties. The result was that any bank that found itself in hot water was likely quickly to be shut out of the fed funds market. Like the proverbial canary in a coal mine, the fed funds market served as a reliable indicator of banks’ health. So long as a bank remained in good standing there, it was unlikely to be in any danger. By certifying soundness, and doing so reliably, the fed funds market helped to contain irrational runs and panics, contributing to the financial system’s integrity (Rochet and Tirole 1996; Furfine 2001).

A second shortcoming of the Fed’s floor system is that it calls for a much-enlarged Fed balance sheet compared to what a corridor system requires. Though some experts (for example, Williamson 2018) claim that the Fed might maintain its floor system with just a few hundred billion dollars in excess bank reserves, most expect it to go no lower than \$1.2 trillion. Indeed, if recent reports are to be credited, the Fed may suspend its current balance sheet “unwind” before excess reserves fall much below their current level, which as of this writing is about \$1.6 trillion. That’s roughly 100 times the level of

excess reserves in early 2008. It is also about 10 percent of the total outstanding federal debt.

What's wrong with that? Floor system proponents claim that there's nothing wrong with it: the increase in banks' reserves holdings, and corresponding increase in the size of the Fed's balance sheet, amount to a "free liquidity lunch." The Fed's holdings of Treasury and agency securities have risen, while public holdings have declined; and those who formerly held the securities now hold additional bank deposits representing the proceeds from selling them (Selgin 2017).

But this "free lunch" perspective neglects the bigger picture, which is best seen by considering that, by creating a new and permanent (if not permanently expanding) demand for government and agency securities, the Fed ultimately contributes to a reorientation of investment behavior that favors the government issuers of those securities over private-sector borrowers, in much the same way as it might by purchasing as many newly issued securities directly from their sources. In a state of full or nearly full employment, that means relatively less real private investment. In short, a floor system entails more "crowding out" of private investment than a scarce-reserve corridor system, and leads to what's likely to be a less productive economy.

But the biggest drawback of a floor system, in my opinion, is the danger it poses of allowing the Fed to abuse its powers of debt monetization. Charles Plosser (2018) has been especially good at drawing attention to this danger. As he notes, under a floor system, the size of the Fed's balance sheet is no longer a crucial determinant of the stance of monetary policy. Therefore the Fed's decisions concerning the timing and magnitude of its asset purchases or sale must be informed by factors other than the state of the macroeconomy. But what other factors might these be? A floor system requires a larger balance sheet than a corridor system does, but beyond that there are no obvious rules—or none that the Fed has articulated—regarding just how big its balance sheet should be. Thus, the size of the Fed's balance sheet has become what Plosser calls a "free parameter"—that is, free to become an object of political meddling, with the Treasury and other interest groups jostling to put pressure on the Fed to monetize this and monetize that.

In the good old prefloor system days, the Fed found it relatively easy to fend off such entreatments: "Sorry, we can't do that, because

we'll end up with more inflation, which is against our mandate." Today that argument won't wash. Instead, Fed officials will have to explain to Congress, or to the president, why the Fed shouldn't create more "free" liquid assets, while helping at the same time to finance some sorely needed government project (a big, expensive wall, perhaps). If you would rather not see that sort of thing happen, then you have at least one reason to regret the Fed's new operating system.

References

- Furfine, C. H. (2001) "Banks as Monitors of Other Banks: Evidence from the Overnight Federal Funds Market." *Journal of Business* 74 (1): 33–35.
- Plosser, C. I. (2018) "The Risks of a Fed Balance Sheet Unconstrained by Monetary Policy." In M. D. Bordo, J. H. Cochrane, and A. Seru (eds.) *The Structural Foundations of Monetary Policy*, 1–10. Stanford, Calif.: Hoover Institution Press.
- Rochet, J., and Tirole, J. (1996) "Interbank Lending and Systematic Risk." *Journal of Money, Credit and Banking* 28 (4, part 2): 733–62.
- Selgin, G. (2016) Testimony before the U.S. House of Representatives Committee on Financial Services, Monetary Policy and Trade Subcommittee Hearing on "Interest on Reserves and the Fed's Balance Sheet" (May 17).
- _____ (2017) "The Strange Official Economics of Interest on Excess Reserves." *Alt-M* (October 3).
- _____ (2018) *Floored!: How a Misguided Fed Experiment Deepened and Prolonged the Great Recession*. Washington: Cato Institute.
- Timiraos, N. (2019) "Fed Officials Weigh Earlier-Than-Expected End to Bond Portfolio Runoff." *Wall Street Journal* (January 25).
- Williamson, S. (2018) "Fed Balance Sheet News." *New Monetarist Economics* (July 4).