



## The Exit Strategy: It's About Hiking the Fed Funds Rate, Not Necessarily Soaking Up Excess Reserves

Most rational investors accept the dual proposition that a Fed funds rate pinned against zero and near-\$800 billion of excess reserves sloshing around the banking system are not enduringly sustainable. This is the case despite the fact that most – though a smaller most – applaud the Fed for engineering these outcomes, so as to cut off the fat tail risk of deflationary Armageddon.

The consensus overwhelmingly holds that once that fat tail has been cut off and then killed, borrowing from Colin Powell's famous description of America's strategy for running Iraq out of Kuwait, it will be necessary for the Fed to exit its extraordinarily accommodative strategy, hiking the Fed funds rate and soaking up all those excess reserves. It's hard to argue with the basic thrust of this exit thesis. Because it's basically right!

I must admit, however, that I'm perplexed that so many pundits put so much emphasis on the importance of the Fed soaking up excess reserves, as if it is a necessary condition for hiking the Fed funds rate. **It is not.** To be sure, it used to be, before the Fed had the legal authority to pay interest on reserves, which Congress granted last fall. Before then, the only way the Fed could achieve a meaningfully positive Fed funds rate target was to constrain the supply of reserves relative to the banking system's demand for reserves, essentially required reserves.

If there were excessive excess reserves, then the Fed funds rate would fall below the Fed's target, as banks with excess would be willing to lend them out in the Fed funds market below the Fed funds target, given that if they simply left them at the Fed, they would earn nothing.

But now, the Fed pays interest on banks' excess reserves (presently at an interest rate of 0.25%, the top of the Fed's 0% – 0.25% target band for the Fed funds rate). Thus, logic says that banks with excess reserves will not lend them in the Fed funds market at a rate appreciably lower than the Fed pays, but simply leave them on deposit at the Fed. Accordingly, the rate that the Fed pays on excess reserves should now act as a proximate floor for the Fed funds rate, even if there are huge excess reserves in the system. Thus, by hiking the rate it pays on excess reserves, the Fed now has the ability to enforce a rising Fed funds rate target – even **before** it “unwinds” its bloated balance sheet.

## The Present Reality

Once the Fed took its Fed funds target to 0% – 0.25% last winter, the Fed no longer needed to “maintain pressure on bank reserve positions,” in technical Fed speak words. Thus, the Fed was freed to expand its balance sheet as much as it saw fit, no longer needing to “sterilize” the reserve creation associated with expanding the asset side of its balance

sheet, either via lending operations or asset purchases, in what Chairman Bernanke has labeled “Credit Easing.”<sup>1</sup>

And the Fed has indeed used that freedom munificently, essentially doubling the size of its balance sheet relative to last summer, in the process creating all those excess reserves. They are not a “problem” because the Fed actually wants the Fed funds rate to trade within a whisker of zero – that’s the target!

I hasten to add that the Fed does not have a target for the amount of excess reserves in the system, a point Chairman Bernanke has forcefully stressed, resisting the call of some of his brethren to establish one, so as to have some (monetarist) metric for evaluating what the Fed is doing. The amount of excess reserves, a Fed liability, is a function of what the Fed is doing on the asset side of its balance sheet. Put more wonkishly, the amount of excess reserves is an outcome of Credit Easing, not an exogenously targeted quantity, as was the case when Japan was pursuing Quantitative Easing earlier this decade.

Chairman Bernanke has forcefully made this distinction himself, which argues for reciting his words:<sup>2</sup>

### ***Credit Easing Versus Quantitative Easing***

*The Federal Reserve's approach to supporting credit markets is conceptually distinct from quantitative easing (QE), the policy approach used by the Bank of Japan from 2001 to 2006. Our approach – which could be described as “credit easing” – resembles quantitative easing in one respect: It involves an expansion of the central bank's balance sheet. However, in a pure QE regime, the focus of policy is the quantity of bank reserves, which are liabilities of the central bank; the composition of loans and securities on the asset side of the central bank's balance sheet is incidental. Indeed, although the Bank of Japan's policy approach during the QE period was quite multifaceted, the overall stance of its policy was gauged primarily in terms of its target for bank reserves.*

*In contrast, the Federal Reserve's credit easing approach focuses on the mix of loans and securities that it holds and on how*

*this composition of assets affects credit conditions for households and businesses. This difference does not reflect any doctrinal disagreement with the Japanese approach, but rather the differences in financial and economic conditions between the two episodes. In particular, credit spreads are much wider and credit markets more dysfunctional in the United States today than was the case during the Japanese experiment with quantitative easing. To stimulate aggregate demand in the current environment, the Federal Reserve must focus its policies on reducing those spreads and improving the functioning of private credit markets more generally.*

*The stimulative effect of the Federal Reserve's credit easing policies depends sensitively on the particular mix of lending programs and securities purchases that it undertakes. When markets are illiquid and private arbitrage is impaired by balance sheet constraints and other factors, as at present, one dollar of longer-term securities purchases is unlikely to have the same impact on financial markets and the economy as a dollar of lending to banks,*

*which has in turn a different effect than a dollar of lending to support the commercial paper market.*

*Because various types of lending have heterogeneous effects, the stance of Fed policy in the current regime – in contrast to a QE regime – is not easily summarized by a single number, such as the quantity of excess reserves or the size of the monetary base. In addition, the usage of Federal Reserve credit is determined in large part by borrower needs and thus will tend to increase when market conditions worsen and decline when market conditions improve. Setting a target for the size of the Federal Reserve's balance sheet, as in a QE regime, could thus have the perverse effect of forcing the Fed to tighten the terms and availability of its lending at times when market conditions were worsening, and vice versa.*

*The lack of a simple summary measure or policy target poses an important communications challenge. To minimize market uncertainty and achieve the maximum effect of its policies, the Federal Reserve is*

*committed to providing the public as much information as possible about the uses of its balance sheet, plans regarding future uses of its balance sheet, and the criteria on which the relevant decisions are based.*

Yes, I know that many of your eyes are probably glazing over about now, given my (and Ben's) wonkishness. I'm sorry about that, but this is really, really important stuff to understand, given the widespread yammering about the need for the Fed to have an exit strategy to de-create all the excess reserves it has created, as if they are intrinsically the kindling for an (eventual) rip-roaring inflationary fire. They are not.

To be sure, the textbooks of our youth, which focused on the money multiplier, did stress the relationship between the Fed's creation of reserves and banks' ability to create deposits, i.e., the money stock, as banks created credit. I remember, and I'm sure a number of you do, too, those old T Accounts in the textbook, which we had to replicate in our blue (or was it yellow?) exam books. The "story" was about how the Fed could

“pump up the money supply” – create reserves, which banks would then use, in a multiplier fashion, to create bank loans and, thus, create bank deposits, which are essentially the money stock.

But actually, that’s not how the world really works, even though that answer could get you an A way back when in school (and for all I know, maybe it still does). What the Fed does is peg the Fed funds rate, which influences the demand for credit, both bank credit and capital market credit, supplying whatever reserves are necessary to maintain the Fed funds rate peg.

To be sure, we are presently living in an unusual world, in that the Fed is pegging the Fed funds rate at effectively zero. But it is not stimulating robust demand for credit, or alternatively, it is not stimulating bankers to gin up demand for credit by loosening terms and conditions to prospective borrowers. Actually, reality is probably a bit of both: reluctant borrowers **and** reluctant lenders.

Thus, we can categorically say that the near-zero Fed funds rate is not, for the moment, fueling an inflationary pace of aggregate demand growth relative to the economy’s supply potential. And neither is the Fed’s Credit Easing, which is the proximate cause for the explosion of excess reserves in the system. Yes, in the fullness of time, zero Fed funds could conceptually re-ignite borrowers’ and lenders’ mojo. Indeed, that’s precisely the Fed’s objective. And if and when that objective is achieved, the Fed funds rate will need to be hiked to temper the re-ignited mojo, so as to prevent the economy from overheating.

But right now, the least of my worries, and I think the Fed’s, too, is the prospect for an overheated economy, putting too many idled resources, both labor and industrial capacity, back to work too quickly. Actually, it would be delightful if that were our primary worry! But it isn’t, and likely won’t be for an extended period, by the Fed’s own reckoning. Thus, it is way, way too early to get wrapped around the axle about the Fed’s exit strategy from its zero Fed funds target.

It is also simply wrong to get wrapped around the axle about the amount of excess reserves in the system. The Fed now has the ability to hike the Fed funds rate, despite a huge reservoir of excess reserves, because it now has the legal ability to pay interest on those reserves.

To be sure, not all institutions with excess liquidity have access to the Fed, so as to earn the rate the Fed pays on excess reserves. And, in the limited time the Fed has had this tool, there have, at times, been slippages between the Fed funds rate target and the actual Fed funds rate, the latter trading south of the target, as those with excess liquidity lend it out in the overnight markets for whatever they can get. But logically, as New York Fed President Bill Dudley has noted,<sup>3</sup> this outcome – during times of acute market stress – has most likely been the result of banks' reluctance to use scarce balance sheet space to arbitrage the actual Fed funds rate back up to the rate the Fed pays (borrowing in the market at rates below what the Fed pays, then turning around and on-lending that money to the Fed at the Fed's rate).

## **Fast Forward to a (Distant) Tomorrow**

When the time comes for the Fed to actually hike its Fed funds rate target, logic would suggest strongly that the banking system will have sufficiently healed such that bankers will not leave risk-free arbitrage profits on the floor. Thus, the Fed can tighten – hike rates! – even if there are still large excess reserves in the system. Yes, it is logical to expect, as Chairman Bernanke has suggested, that excess reserves will be appreciably smaller at that time, not because the Fed is explicitly pursuing that outcome, but rather because usage of its Credit Easing facilities will naturally decline with reduced demand for them.

But given that Credit Easing has been expanded to large – and potentially, very large – outright holdings of Agency MBS (mortgage-backed securities) and debentures, as well as a lesser amount of longer-dated Treasuries, it may well be the case that there will still be a lot of excess reserves in the system when the time finally comes for the Fed to hike the Fed funds rate. Conceptually, the Fed could “soak them up,” by selling

the securities outright, selling them temporarily via matched sale/repurchase agreements, or by getting legal authority to issue interest-paying bills or having the Treasury issue bills and run up its deposit at the Fed.

Chairman Bernanke and a number of his colleagues have talked about all these various tools, stressing they have plenty of potential doors in their exit strategy. And indeed they do, even though simply hiking the rate the Fed pays on excess reserves is the cleanest way to hike the Fed funds rate.

In fact, the other tools the Fed has are, in my opinion, of greater importance than simply to engineer a hike in the Fed funds rate. If used **alongside** a hike in the rate paid on excess reserves, the “package” would communicate loudly and clearly that the Fed is ending its emergency endeavors in quasi-fiscal policies, reaffirming, with shoes thumping on table, its independence in monetary policy. And there is a great deal to be said for that, a great deal, even though the Fed

technically has the ability to hike the Fed funds rate notwithstanding a bloated Fed balance sheet and, thus, huge excess reserves.

## Bottom Line

And when is all this going to happen? Last week, the markets started to romance the notion of before the end of 2009. To me, this is simply silly. In the matter of cutting off, and then killing, the fat tail risk of deflationary Armageddon, boldness in execution is no vice, while patience in declaring victory is indeed a virtue. The Fed has been bold and is committed to patience. Bravo! And the first Fed rate hike? Call it no sooner than 2011.

Paul McCulley

Managing Director

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mcculley@pimco.com

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<sup>1</sup> Ben Bernanke, “The Crisis and the Policy Response,” <http://www.federalreserve.gov/newsevents/speech/bernanke20090113a.htm>

<sup>2</sup> Ben Bernanke, “The Crisis and the Policy Response,” <http://www.federalreserve.gov/newsevents/speech/bernanke20090113a.htm>

<sup>3</sup> William Dudley, “A Preliminary Assessment of the TALE,” <http://www.newyorkfed.org/newsevents/speeches/2009/dud090604.html>

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P I M C O

840 Newport Center Drive  
Newport Beach, CA 92660  
949.720.6000

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