

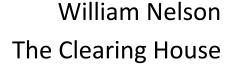


In Defense of Going Home





New York Fed/Columbia SIPA Monetary Policy Implementation Workshop





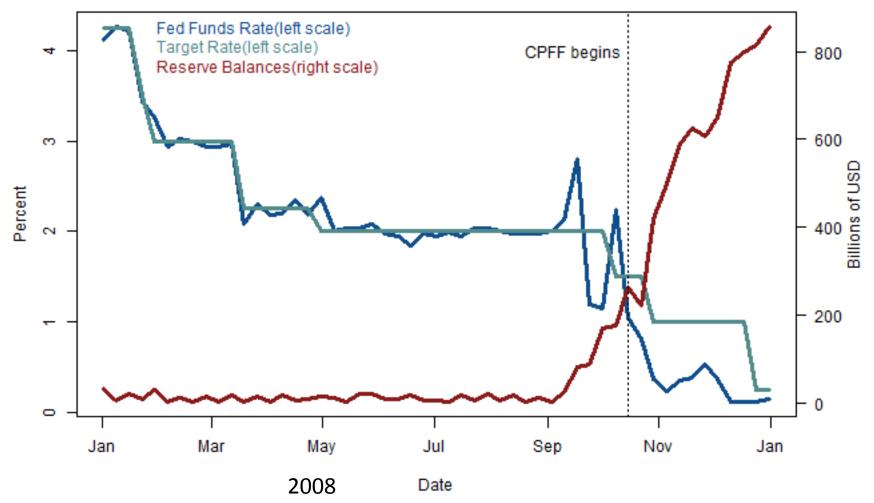




11 July 2017

"IOER Baby!"

Falling Through the Floor





Good frameworks start at home

- Discussions of the FOMC's choice of monetary policy framework generally seem to take as a starting point the current situation.
- I'm going to take as a starting point a world in which the FOMC has drained reserves to the point where it has "gone home" to a corridor system in which
 - The FOMC announces a target for the federal funds rate
 - The Board sets IOER 100 bp below that target
 - The Board and Reserve Banks set the discount rate 100 bp above that level.
 - The FOMC hits its target through daily Treasury repos with broker dealers to provide the level of reserves banks' demand.
- Remarks draw heavily on my blog post "FOMC go home."



What would the demand for excess reserves be?

- Demand would not necessarily be elevated because of the LCR. As confirmed in conversations with a range of banks, banks can satisfy their LCRs by terming out their borrowings and by holding other forms of HQLA.
- Excess reserves would be very expensive to hold.
 Banks would hold them primarily to avoid overnight overdrafts.
- Consequently, there is no particular reason why excess reserves in aggregate wouldn't be quite low, perhaps even as low as pre IOER \$1-2 billion, but in any case, low.



What would the fed funds market look like?

- In the fed funds market, at the end of the day, banks would get a clearer
 picture of their final account balance, and those needing funds would
 borrow from those with extra funds. That is, the funds market would look a
 lot like it did before the crisis.
- Most of the time the fed funds rate would be determined by bank-to-bank transactions, not bank-to-Fed transactions, although sometimes a mistake forecasting the demand for, or supply of, reserves would push the funds rate to the edges of the corridors.
- While the LCR discourages overnight borrowing, it encourages overnight lending. Consequently, while the front-end of yield curve is likely to steepen to clear the market, the implication for the level of activity in the fed funds market is ambiguous. For a comprehensive discussion of the impact of post-crisis regulations on monetary policy, see the BIS report "Regulatory change and monetary policy."

What would other money markets look like?

- The Fed would be a moderate player in the repo market; less important than the large broker-dealers.
 - I assume the overnight reverse repo (RRP) facility would be closed or at least that the RRP interest rate would be also be well below the target fed funds rate.
- The federal funds rate would be well arbitraged into other money market rates just as it was pre crisis and just as it is now.
- In sum, the Fed would have a small footprint and yet good monetary policy control.



What would the FOMC's balance sheet look like?

- Liabilities would be currency, reserves held to meet requirements, Treasury cash balance, RRP maybe, and various other smaller items.
- Assets would be Treasury securities and a small amount of Treasury repo. Agencies too, possibly. That's a separate debate.
- Currency is currently \$1.5 trillion. If it grows at 4 percent, in 5 years it would be 1.8 trillion. So Treasury holdings could be only somewhat over \$2 trillion if excess reserves were nearly all drained in 5 years.
- In short, the balance sheet would be larger, of course, because of currency growth, but otherwise similar to its pre-crisis configuration.



What would happen if there were another crisis?

- The Fed could respond quickly and effectively
 - Money market term spreads would rise as banks became increasingly worried about liquidity.
 - If the Fed wanted to respond, it could address higher term rates through the swap lines and by reopening the TAF.
 - The Fed could oversupply reserves and push money market rates down to IOER.
 - If the target falls to zero and additional stimulus is needed:
 - The small Fed balance sheet would leave it well positioned to purchase longer-term Treasury and Agency securities.
 - The Fed's ability to use forward guidance would be the same as always.

Wouldn't a large balance sheet enhance financial stability?

- Greenwood, Hanson, and Stein (2016) argue that oversupplying reserves will reduce the moneyness premium and discourage liquidity transformation.
- But buying HQLA (Treasuries) to create HQLA (reserves) is an inefficient way to increase the supply of liquid assets.
- A better alternative would be for the Fed to create a special discount window/deposit facility that recreates a line of credit (see "Recognizing the value of the central bank as a liquidity backstop"), converting illiquid discount window collateral into HQLA.
- Such a facility would provide the Fed a separate instrument the spread charged on the "line" to control the moneyness premium.



Wouldn't a large balance sheet enhance fin. stab. (cont.)?

- Moreover, two much more straightforward ways to reduce the cost for banks of complying with the LCR (and the resulting incentive for liquidity transformation to take place outside of the banking system) are
 - Reduce the eSLR to a level consistent with international standards
 - 2. Make HQLA more usable so that banks do not have to hold levels in excess of requirements to avoid any chance of a transitory breach.
- For further discussion see the TCH research notes "<u>Liquidity</u> and <u>Leverage Regulation</u>, <u>Money Market Structure</u>, and the <u>Federal Reserve's Monetary Policy Framework in the Longer Run</u>" and "<u>Unlocking the Liquidity Coverage Ratio</u>."



In short, there is nothing preventing the FOMC from going home. But why go home?

- If it ain't broke, don't fix it. It is only if you consider the current peculiar situation to be the base case that anything seems broken.
- With a floor system, the Fed would have a much larger footprint and will directly determine market pricing.
- There can't be a small balance sheet floor system. When the fed funds rate equals IOER, the demand for reserves will be huge because of the LCR.
- With a larger footprint and giant balance sheet, the Fed will be an easier political target,
 - Particularly because of giant interest payments.
 - And the balance sheet could be an irresistible means for Congress to engage in credit policies.



Sidebar on LCR (part 1)

- Banks are required to maintain LCRs of at least 100 percent.
 Banks tell me they maintain LCRs of more than 110 percent.
- $LCR = \frac{High \ quality \ liquid \ assets \ (HQLA)}{30 \ day \ stressed \ net \ cash \ outflows}$
- HQLA consists of excess reserves, Treasuries, and 75 percent of agency securities/MBS
- Banks currently hold about \$3.9 trillion in HQLA.
- As Fed drains reserves it will be selling HQLA, although the offset is not perfect because of the haircut on agencies and a requirement that 60 percent of HQLA be reserves and Treasuries.
- If IOER is about equal to short-term interest rates, banks will continue to satisfy the LCR with reserves (so there can be no small balance sheet floor system.)



Sidebar on LCR (part 2)

- As reserves become scarcer/ more expensive, banks can
 - hold other forms of HOLA or
 - reduce net cash outflows by terming out their borrowings or shortening their lending (subject to a 75 percent cap on inflows relative to outflows)
 - Shifting demand for, and supply of funds will steepen the front end of the yield curve and lower r*, see <u>Liquidity Regulations, the Neutral Real</u> <u>Federal Funds Rate, and the Money Premium</u>
- Interesting fact: Treasury securities acquired in reverse repos count as HQLA.
 - Because the assumed rollover rate on Treasury RRP is 100 percent, from a LCR perspective, it makes no difference if the securities are acquired in RRP or purchased outright.
 - True also for agency RRP but a little more complicated.



Ceiling could use some work too (part 1)

- One thing that clearly is "broke" is the discount window. It will not put an effective ceiling on a policy corridor because banks won't borrow from it.
- If banks hold reserves to meet the LCR to some extent, then making HQLA more usable will lead banks to free up reserves if market rates spike at the end of the day (see "Unlocking the Liquidity Coverage Ratio").
- Especially effective would be to set up a standing discount window and paired deposit facility that mimic a line of credit (see "Recognizing the Value of the Central Bank as a <u>Liquidity Backstop</u>")



Ceiling could use some work too (part 2)

- For the purposes of establishing a ceiling for a policy corridor, it will be important to educate the public, the press, Congress, and especially supervisors about how different such borrowing is from lender of last resort borrowing. Everyone outside of this room thinks the purpose of the discount window is LOLR.
- One promising idea (not mine) is to emphasize the difference by establishing the ceiling using a late-day standing Treasury/Agency repo facility available to depository institutions authorized under the Fed's OMO authority not its discount window authority.
 - The transactions would still be reported to the public, but should be labelled as monetary policy transactions

