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## More on interest on reserves

Following my [previous macroblog post](#) on tools for managing the Federal Reserve's balance sheet, I received a few questions, and I'm using today's post to reply to these.

First, a question from Alexander Singer:

*Wouldn't the reserves we are talking about fall as well as a result of banks actually lending money out to their customers?*

The banking system cannot create or destroy reserves no matter how many loans they make as long as the borrowed funds are deposited. For example, if one bank takes a portion of its reserve balance and turns it into a loan, and those borrowed funds are deposited at a second bank, then that deposit is matched by an equivalent increase in the second bank's reserve balance. The net effect on reserves is zero.

The Fed has created a substantial amount of reserves during the past year and a half. At the end of 2007 reserve balances at Federal Reserve stood at about \$8 billion. Currently reserve balances are closer to \$900 billion.

Will the broader money supply grow once lending increases? Yes, lending will generate bank deposits, and bank deposits (plus currency) equals money. But that won't have any direct impact on total reserve balances within the banking system.

A second question comes from Tom:

*With interest on reserves (IOR), why would a bank not want to keep its reserves at the existing level after the policy rate is increased? They are operating on a horizontal segment of their demand for reserves. I just don't see why raising the policy rate will be a problem with IOR. What am I missing?*

Some economists have argued that paying interest on reserves will render the demand for reserves indeterminate (see, for example, the 1985 JME article by Neil Wallace and Tom Sargent). But proponents argue that pinning down the demand function is not crucial for an interest on reserves based monetary policy to be effective (see, for example, [Goodfriend 2002](#)). In Goodfriend's view (which is based on the assumption that interest rate rules for monetary policy deliver coherent outcomes for inflation and output), there is great value in a central bank being able to pursue separate interest rate and bank reserve policies. Interest rate policy would be used to maintain overall macroeconomic stability, while bank reserve policy would be used to address financial market objectives. Linking the policy rate to the interest rate paid on reserve balances means that a change in the interest rate does not require changing the supply of reserves.

Why might this be useful? Here's one hypothetical scenario: Suppose the Fed needed to keep bank reserves at a high level because of lingering demand for liquidity in financial markets that is not being provided by the private sector. Now, suppose the Fed also wanted to tighten monetary policy because of separate macroeconomic stability concerns. Interest on reserves provides a tool to meet both a financial stability objective (by helping the functioning of credit markets) and a macroeconomic stability objective (by influencing banks' willingness to lend to private borrowers).

A bit more detail. Banks used to view reserves as a "hot potato." Reserves are useful to banks in making settlements, etc., but banks did not want hold too many reserves because they were a nonearning asset. The Fed did not compensate banks for holding the reserves and so banks had better uses for their funds. The Fed was able to keep the market price for reserves (its policy instrument) positive by keeping the amount of reserves scarce. But today, reserves are far from being scarce, and the Fed keeps the market price for reserves positive by paying interest on reserve balances (albeit only 25 basis points).

Keister, Martin, and McAndrews (2008) called this new approach "[Divorcing Money from Monetary Policy](#)." I think that is a bit strong, but it does amount to an amicable separation between reserves management and monetary policy. Textbook descriptions of money and banking emphasize an important role for reserve management in the [implementation of monetary policy](#) (daily open market operations, etc.). But clearly that is not the only possible operating approach.

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