## Economic commentaries

## Misunderstood central bank reserves

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## MISUNDERSTOOD CENTRAL BANK RESERVES

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Recently, the media in Norway and other countries have reported that euro area banks have sharply increased their deposits with the ECB. That is correct. Some commentators attribute the high level of deposits with the ECB to banks' unwillingness to lend to one another or to their customers, preferring to keep their funds on deposit with the central bank. This conclusion is misleading. It may be that banks are unwilling to lend, but the volume of deposits with the ECB reveals nothing about this.

A wide range of actions taken in recent years have massively enlarged central bank balance sheets. The Federal Reserve, Bank of England and the European Central Bank have in particular purchased various kinds of securities and have offered bank loans with maturities that are longer than normal. When central banks purchase securities or lend, they supply banks with central bank reserves. "Central bank reserves", or simply "reserves", are banks' deposits with the central bank. Just as households and enterprises have accounts with private banks, banks have accounts with the central bank. The total of banks' deposits with the central bank is the quantity of reserves in the banking system.

Banks need reserves to settle interbank transactions. Assume that a customer of bank A transfers NOK 1,000 to a customer of bank B. If no other transactions take place in the banking system that day, the transaction is settled by reducing bank A's deposits with the central bank by NOK 1,000 and increasing bank B's deposits with the central bank by NOK 1,000. When a large number of interbank transactions take place, banks' net positions are calculated, with banks' deposits with the central bank adjusted accordingly. Normally, central banks manage the quantity of reserves in the banking system by engaging in various types of market operations aimed at keeping the shortest money market rates close to the key policy rate.<sup>2</sup>

Central bank reserves are the only approved interbank means of payment, and only the central bank can create them. Central bank reserves are shifted between banks' accounts with the central bank in a closed system. Banks cannot on their own affect the total quantity of reserves in the banking system. If the central bank neither adds nor drains reserves from the banking system, the quantity of reserves in the banking system at the end of the day must be the same as when the

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<sup>&</sup>lt;sup>2</sup> See Staff Memo 4/2010, 10/2010 and 5/2011 from Norges Bank.

day began. Reserves will merely be redistributed among banks. This characteristic of reserves is often misunderstood.

This misunderstanding has gained particular prominence in recent weeks, after the European Central Bank (ECB) began to offer long-term loans to euro area banks. In December, the ECB lent nearly EUR 500 billion with maturity of three years without draining this liquidity in another manner. This implies that the ECB added central bank reserves to the banking system in the same amount. The loans are made by crediting banks' accounts with the ECB. Thus, banks' deposits with the central bank increase in precisely the same amount as the amount lent.

By itself, the fact that banks have substantial deposits with the central bank after having borrowed reserves with long maturity provides no information about what banks have used these funds for. Whether banks have let the loans remain untouched in their central bank accounts, lent the reserves or purchased securities with them, the funds must in the end wind up as deposits with the central bank. For example, if a bank uses reserves it borrowed from the central bank to buy a government bond, the bank receives the bond, paying for it by transferring reserves to another bank. As explained above, the only result is that these two banks' deposits with the central bank are adjusted accordingly; the one bank's deposits with the central bank increase, while the other bank's deposits are reduced by the same amount. Neither interbank transactions nor transactions between banks and their customers have any significance for the total quantity of reserves.<sup>3</sup>

A number of commentators seem to think that *because banks have increased their overnight deposits with the ECB in an amount corresponding to their long-term loans from the ECB*, they are unwilling to lend these funds or use them to purchase securities. This conclusion is wrong. It is conceivable, of course, that banks are unwilling to using these borrowed funds, but such a claim must be backed by data other than an increase in banks' deposits with the central bank.

<sup>&</sup>lt;sup>3</sup> The only exception is if a bank has a transaction with the central government, and the central government has its account with the central bank.