Central Bank Assets in Normal Times

Central banks acquire assets by purchasing them or by making loans. When a central <u>bankpurchases</u> an asset, say a bond, it pays by creating reserves or currency, thus increasing its assets and liabilities by equal amounts. Similarly, when a central bank extends a loan, it creates the new reserves that are lent. Central banks' counterparties are usually banks, although some accept nonbank counterparties as described in <u>vesterday's post</u>. In normal times, central banks hold mainly government bonds, foreign exchange reserves, and loans to banks as assets. However, the relative importance of these assets varies a lot across central banks. Prior to the crisis, changes to a central bank's asset holdings were typically passive and did not have a monetary policy purpose.

The Fed's balance sheet before the crisis was relatively simple; at the end of 2006, nearly 90 percent of its assets were U.S. Treasuries, broadly matching the amount of outstanding currency, as in the figure below.

Assets	Liabilities
Government bonds	

Central Bank Holding Mainly Government Bonds

In contrast, central banks in small open economies tend to have a large share of foreign reserves on their balance sheets, as in the figure below. This is partly due to history: When exchange rates were fixed and capital flows regulated, large holdings of foreign reserves ensured that imports could be funded, and made fixed exchange rates credible. With free capital flows and floating exchange rates, these aims are less important, but central banks still sometimes intervene in foreign exchange markets and need foreign reserves for this purpose. Furthermore, during financial stress, reserves may be used to serve central bank customerssuch as the government, and to reduce the risk of instability in financial systems heavily dependent on foreign currency funding. The importance of these objectives will depend on each country's need for interventions and the unhedged exposure of its financial system to exchange rate risk. While reserve holdings are valuable in those stress scenarios, the exchange rate risk to which it exposes the central bank could be higher than the interest rate risk associated with holding government bonds. See this paper for further discussion of the role of foreign reserves on central bank balance sheets.

Assets	Liabilities
Foreign reserves	

Typical Small Open Economy Balance Sheet

The Norges Bank is an example of a central bank with a large share of foreign reserve holdings, with 86 percent of its assets (excluding the

sovereign wealth fund) in this form at the end of 2006. In comparison, the Fed held negligible foreign exchange reserves of about 4 percent.

Loans to banks can also be a sizable asset of central banks. This often happens when the central bank holds few securities as assets, relative to the amount of its liabilities, notably currency. However, sizable lending to the banking sector may occur even from central banks that hold a substantial amount of securities against the currency. The loans may be useful to create reserves, as discussed above, which can facilitate interbank payments. If the supply of reserves is low, central <u>bank lending</u> to banks can make reserves available to support payments among banks. More than half the assets of the BoE in December 2006 were loans to banks in the form of repos, and at the ECB, it was close to 40 percent of assets, as in the figure below. In comparison, only about 4 percent of Fed assets were loans and repos at that time.

Central Bank Assets with a Large Share of Loans to Banks

Assets	Liabilities
Government bonds	
Foreign reserves	
Lending to banks	

In some cases, a large share of bank loans on the central bank's balance sheet may be an indication of undeveloped money markets. This scenario requires the central bank to provide liquidity directly to its banks, rather than let them redistribute the liquidity among themselves through the money market. To sum up, even in normal times the composition of central bank balances sheets can vary considerably across countries. While all central banks issue two key forms of money, currency and reserves, as liabilities, the relative size of these items can vary a lot. Some central banks also issue deposits to the government and offer term liabilities, while others don't. Assets typically consist of government bonds, foreign reserves, and loans to banks, in varying proportions, but again, with considerable variation across central banks.