How Banks make money out of thin air

Most money in the economy is held in the form of deposits with banks rather than in the form of notes or coins. If you purchase an asset from me for $1000, payment is normally effected by reducing your checking account by $1000 and increasing my account by $1000. The net change in bank deposits is zero. If one year later, you decide to sell the asset and I purchase it back from you for $2000, where does the additional money come from? The transaction this time increases your account by $2000 and reduces my account by the same amount. The net effect is still zero.

The bank can loan me the extra $1000 simply because there is a corresponding deposit of $1000 in another account. It does not matter if the deposit is not with the same bank; the clearing system offsets all transactions between banks and any temporary shortfall is made up by inter-bank loans.

Reserve Requirements

The banks could keep on creating "money" indefinitely if it were not for reserve requirements. The central bank (the Fed in the US) requires that commercial banks hold a certain percentage of their deposits as reserves, on hand or on deposit with the central bank.

Reserves place a limit on the amount of money that commercial banks can create. If 10% of deposits are required to be held as reserves, the banks can lend a maximum of ten times the amount deposited.

If the bank receives a deposit of $100 it can lend out $90. The borrower can then write a check for $90 which is deposited by someone else. The bank can lend another $81 (against the $90 deposit) which is again deposited.

This process continues until the amount that can be loaned is exhausted. The limit is $1000: $90 +$81 + $72.90 + $65.61 and so on.

The Central Bank

The primary function of most central banks is to protect the integrity of the nation's currency. The chief threat is inflation and the central bank attempts to control inflationary forces by raising and lowering interest rates. We often read of the Fed or some other central bank raising or lowering interest rates but how does it do so? It could raise or lower the reserve requirements for central banks but this is seldom used. The favored method is through open market operations.

Open Market Operations

The central government raises funds through its treasury which normally sells bonds via auction in the open market. The proceeds are held on deposit with the banking system. To increase liquidity (the amount of deposits) in the economy, the central bank will purchase bonds on the open market, thereby increasing deposits with commercial banks. If the central bank wants to reduce liquidity in the economy, it will sell some of its bond holdings in the open market. This may seem a bit strange at first sight but the effect is to reduce deposits with the commercial banks. Bond purchasers have to pay the central bank which does not deposit the funds back in

the commercial banking system. The effect is that banks have to reduce their loan portfolio by roughly ten times the amount withdrawn from the system.

The Discount Rate

The discount rate set by the central bank is an indication of their interest rate policy. Its only practical application is when the market is short of liquidity and commercial banks are unable to meet their reserve requirements. They then have to go to the "window" at the central bank and borrow funds overnight at the discount rate. The lower the discount rate is, the more likely banks are to borrow from the central bank to make up any shortfall.