

Economics

Monetary Bits and Pieces

John Ryding (212) 272-4221 / jryding@bear.com

Conrad DeQuadros (212) 272-4026 / cdequadros@bear.com

Meghna Mittal (212) 272-1961 / mamittal@bear.com

Our neo-Wicksellian approach to economics tends to cause us to focus on price signals, such as the price of gold, rather than on quantities, such as the various measures of the monetary aggregates. Indeed, as the Fed long ago abandoned any form of monetary targeting and for almost a decade and a half has announced its interest rate target, analysis of the Fed's balance sheet, monetary aggregates or various bank reserve measures has become something of an arcane art. Recently though, there are some who have been looking at money or reserve measures and drawing what we judge to be some incorrect conclusions about the stance of monetary policy.

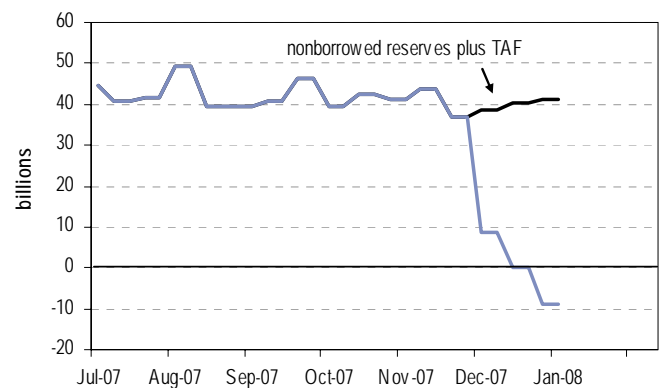
Myth 1: Declining Nonborrowed Reserves Points to Problems

Banks need to hold bank reserves (deposits at the Fed or vault cash) against their deposits. Traditionally, these reserves have been supplied by the Fed, either by open market operations (RPs with primary dealers or outright purchases of Treasuries) or via the discount window. Funds borrowed from the discount window are borrowed reserves and are supplied as demanded by the banks (at a penalty rate of 50 bp above the funds rate target) and the remainder of the reserves supplied by open market operations are so-called nonborrowed reserves. In early August, when the Fed flooded the system with RPs to combat pressures in the money markets, the amount of nonborrowed reserves rose to \$49.2 billion. However, in the latest maintenance period, nonborrowed reserves fell to -\$8.8 billion, leading some to argue that the system was short of reserves and that liquidity remains tight for the banks, which in turn might be constraining lending. This argument is extremely fallacious.

The Fed targets the fed funds rate by regulating the amount of bank reserves—adding more reserves than are demanded at the current fed funds rate drives down the funds rate. Conversely, if the demand for reserves increases, the Fed must increase the supply of reserves to prevent the funds rate from rising. Since the discount rate is a penalty rate (and banks in any event see discount window borrowing as imparting a stigma), most reserves are supplied via open market operations and are nonborrowed reserves. The amount of reserves in the banking system is very small as a deposit base of \$5.7 trillion requires the system to hold only \$41.6 billion in reserves. In an effort to become more creative in providing funding for various assets, the Fed introduced the Term Auction Facility (TAF) in December 2007. The TAF provides term funding (typically 28 days) at a low rate (today's auction went off at 3.01%). Currently, the Fed conducts two (overlapping) \$30 billion auctions per month, which means that the TAF program supplies \$60 billion of reserves at any one time. The

Fed's data treats the TAF program as a form of borrowed reserves and it is clear that the program is supplying more reserves than banks need. Hence, unless the Fed wants the funds rate to fall towards zero, it must drain reserves by other means. It is a simple matter of math that nonborrowed reserves must be negative when borrowed reserves exceed total reserves. (Nonborrowed reserves ought to fall to around -\$18 billion when the next reserves data are released on Thursday because the program is now fully ramped up at \$60 billion but it was only at \$50 billion two weeks ago.)

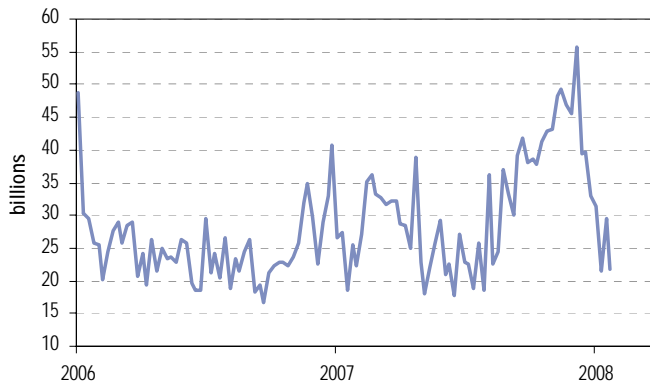
Figure 1. Nonborrowed Reserves and TAF Funds



Source: Federal Reserve Board

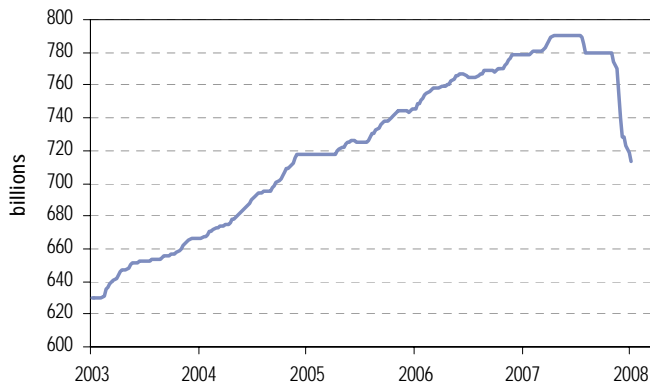
As a practical matter, what does negative nonborrowed reserves mean and how does the Fed achieve this? One way to achieve this would be for the Fed to stop adding funds via RPs and this has been done to some degree. As Figure 2 shows, from a peak of \$55.8 billion in mid-December, the amount of RPs outstanding has fallen to \$21.7 billion—a decline of \$34.1 billion. Another way is for the Fed to allow its outright holdings of Treasury securities to decline. Since the Fed has such a large portfolio of Treasuries, it can do this by not rolling over some of its holdings at the weekly bill auctions. As a result, the Fed's holdings of T-bills has fallen by about \$56.7 billion since December, as the Fed's outright holdings of securities has fallen from \$770 billion in late December to \$713 billion in early February (see Figure 3). Also, it is important to realize that the amount of bank capital is the binding constraint on lending, not bank reserves. The amount of capital in the banking system is unrelated to the amount of bank reserves supplied by the Fed (either borrowed or nonborrowed).

Figure 2. Fed RPs Outstanding



Source: Federal Reserve Board

Figure 3. Fed's Permanent Holdings of Securities

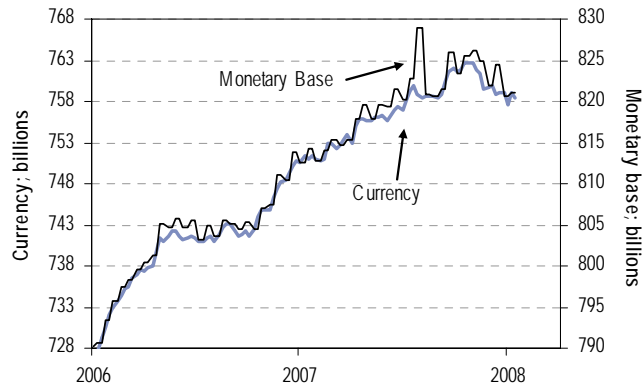


Source: Federal Reserve Board

Myth 2: Monetary Base Points to Tight Money

The next argument is that the monetary base has fallen over the last six months by 0.2%, which shows that rather than easing money, the Fed has been tightening monetary policy. This one is also complete hokum. There are essentially two components to the monetary base—currency in circulation with the public and bank reserves. Currency in circulation is demand determined. If you go to an ATM and take out \$1000 then the bank's vault cash falls by \$1000 and bank reserves fall by \$1000. To prevent a decline in reserves from pushing up the fed funds rate (if many people took out extra cash), the Fed increases its RP operations to offset the decline in reserves. Cash in circulation comprises 91% of the monetary base and, if the public demands to hold smaller cash balances, the Fed must absorb this cash by draining reserves from the banking system—otherwise the funds rate would fall sharply. As Figure 4 shows, falling demand for cash is driving down the monetary base.

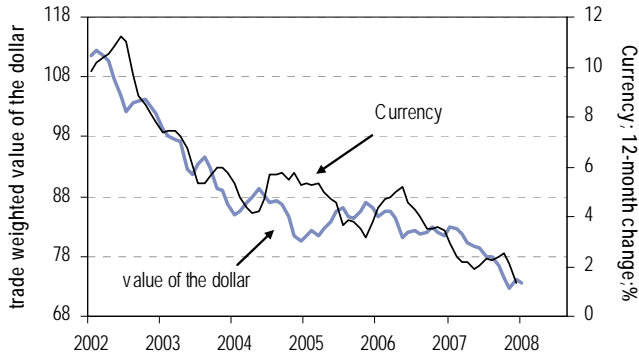
Figure 4. Monetary Base and Currency



Source: Federal Reserve Board

If falling currency demand was a sign that policy was tight—say, because interest rates on deposits were high—then a declining monetary base would suggest that policy was tight. However, this has not been the case. We think the falling demand for cash is due to a weak dollar and is a sign of easy money! Total cash in circulation at the end of last year was about \$759 billion and, given a U.S. population of 303 million, this works out to an average cash holding of \$2500 per man, woman and child in the United States. Check your wallet and we suspect that most of our readers would find themselves well short of this figure. How can this be? The answer is that more than half the dollars circulate abroad—perhaps as a substitute for a domestic currency of dubious purchasing power or perhaps as a result of illicit activities, such as the drug trade. As the dollar has fallen, there has been a sharp improvement in relative value of many local currencies. For example, since the middle of 2006, the Colombian peso has risen in value from roughly 2600 pesos/\$ to 1900 pesos/\$, which represents roughly a 27% depreciation of the dollar against the peso. We chatted today with our Latin American economist, Alberto Bernal, who said that his anecdotal conversations in Colombia suggested a much greater willingness of the public to hold pesos rather than dollars. In Russia, we guess the euro has become a more attractive currency of choice because of the rise in its value relative to the dollar. Why has the dollar fallen? Our argument is that it is because the Fed is too easy and people want other stores of value (including gold).

Figure 5. Currency in Circulation and the Dollar



Source: Federal Reserve Board

We come back to where we started this essay. Monetary quantities cannot be viewed in isolation and neither the decline in nonborrowed reserves nor the fall in the monetary base can be viewed as a sign of tight monetary conditions. We judge

monetary policy to be easy and liquidity to be plentiful. Indeed, we view the monetary base to be a perverse indicator of the stance of monetary policy (easy money appears to be driving down the demand to hold dollars—especially outside the U.S.). The problem with the financial system is the write-down of capital at banks, securities firms and insurers. The problem with the economy is that economic agents do not see the incentives to put liquidity to work in generating economic activity and this is especially true in housing as anticipated declines in home prices further dampen the demand for housing. True economic stimulus would raise incentives by lowering tax rates. Unfortunately, the worst kind of Keynesian fiscal pump priming in Washington is blowing a good chunk of its \$150 billion stimulus package in mailing out checks to households, which does nothing to boost incentives. Our guess is that most of this windfall will find its way into bank accounts or paying down debt and much of what is spent will end up boosting the demand for imports, stimulating China’s already rapidly growing economy.