

Thursday, December 18, 2003

Making Sense of Money Supply Data

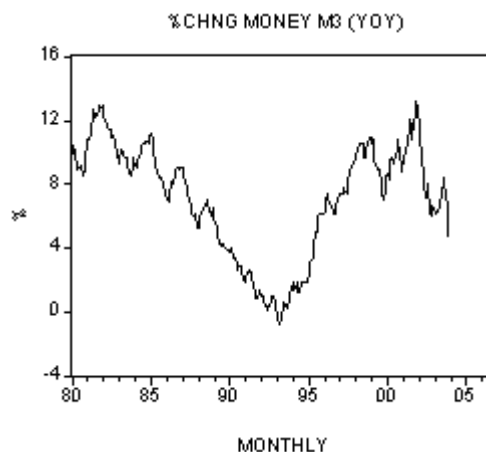
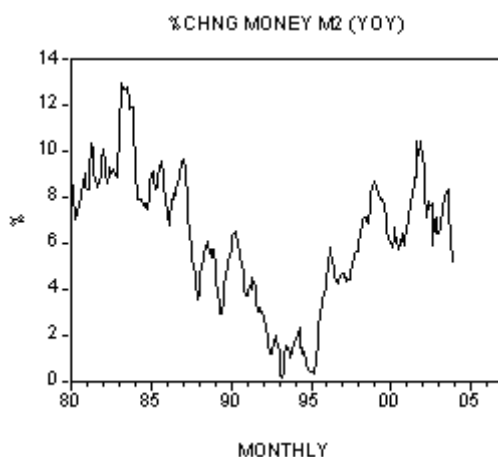
By Frank Shostak

[Posted December 17, 2003]

The yearly rate of growth of money M2 fell to 5.2% in November from 7.5% in October while the yearly rate of growth of money M3 fell to 4.7% in November from 7.5% in the previous month.

How seriously should one take the recent softening in the yearly rate of growth of money supply? Some analysts believe that this softening in the growth momentum could cause problems for financial markets since a fall in the rate of growth implies that the pace of liquidity generation is slowing down. It is also held that a softening in the growth momentum is likely to hurt economic activity.

Economists who follow money supply data are also alarmed by the fact that the growth momentum of commercial bank lending is displaying a visible decline. After climbing to 12.1% in June, the yearly rate of growth of commercial bank loans fell to 6.6% in November. Does the slowdown in the money and credit rate of growth imply trouble ahead?



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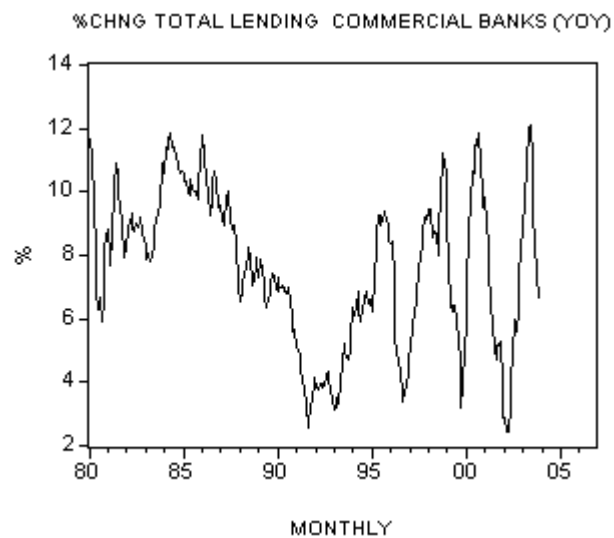
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What matters here is not money and credit as such, but money and credit that are created out of thin air. Loose monetary policies of the Fed coupled with fractional reserve banking are ultimately responsible for the expansion in money supply. It is this expansion that is the root of the problem.

An expansion in money supply sets in motion an exchange of "nothing for something" or the diversion of real resources from activities that generate wealth towards activities that undermine the process of wealth generation. Note that various nonwealth, i.e. false, activities flourish as long as the money supply rate of growth expands.

Once the rate of growth slows down false activities encounter trouble. Since the diversion of real resources toward these activities slows down, a fall in the money rate of growth strangles them. It follows then that rising growth momentum of money leads to an expansion in nonwealth generating activities (also known as an economic "boom") while a fall in growth momentum undermines false activities and results in an economic bust.

As a rule financial markets tend to benefit first from rises in money supply. In other words, the newly injected money lifts the prices of financial assets. As prices of financial assets begin to rise, in order to keep their growth momentum intact the money supply rate of growth must expand. Any slowdown in the money supply rate of growth will slow the growth momentum of financial assets' prices.

Now, most analysts use money M2 or M3 in their analysis. Does it matter which definition of money one uses? A correct definition of money is a must if one wants to glean the right information from monetary indicators. Unfortunately, most popular ways of defining money are flawed and provide a misleading account of what money is and where it is located in an economy.

Consider, for instance, M2. This definition includes money-market deposit accounts. However, investing in a money market fund is in fact investment in various money market instruments. The quantity of money is not altered as a result of this investment; only the ownership of money has temporarily changed.

If Joe invests \$1,000 with a money market fund, the overall amount of money in the economy will not change as a result of this transaction. Money will move from Joe's demand deposit account to a money market demand deposit account with a bank. To incorporate the \$1,000 invested with the money market fund into the definition of money plus the original \$1,000 would therefore amount to double counting.

The problem of double counting is also not resolved by the money of zero maturity

definition of money (MZM)—a relatively recent money supply definition. The essence of MZM is that it encompasses financial assets with zero maturity. Assets included in MZM are redeemable at par on demand. This definition excludes all securities, which are subject to risk of capital loss, and time deposits, which carry penalties for early withdrawal. In short, MZM includes all types of financial instruments that can be easily converted into money without penalty or risk of capital loss. [1]

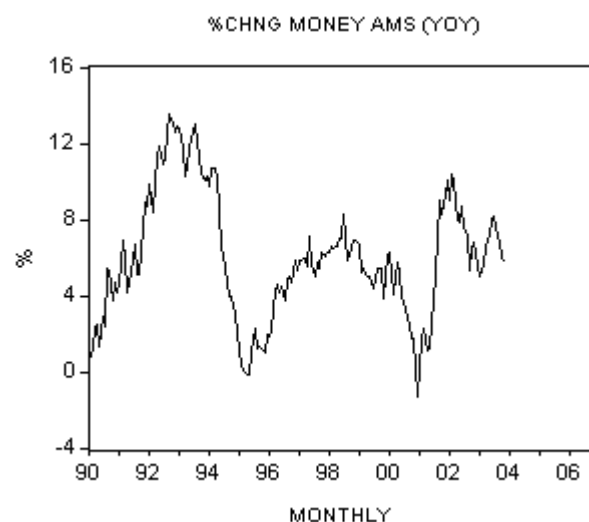
Observe that MZM includes assets that can be converted into money. This is precisely what is wrong with this definition, since it doesn't identify money but rather various assets that can be easily converted into money. In short, it doesn't tell us what money actually is and where money is located, which is what a definition of money is supposed to do.

This must be contrasted with the Austrian School of Economics Money Supply definition (money AMS) that aims at identifying what money is and where it is located in an economy.[2] In contrast to MZM money, the AMS definition doesn't deal with assets that can be converted into money but rather with money. The AMS definition only counts the amount of money and doesn't include various forms of investments, which are in fact credit type transactions. (Credit transactions emerge when Joe lends his \$1,000 to Bob, i.e., he temporarily transfers the ownership of the money. Also, when Tom invests his \$1,000 he is engaging in a credit transaction since he transfers the ownership of the \$1,000 to the issuer of a financial paper).

Since the money AMS definition deals only with money it does a much better job in the assessment of the likely direction of economic activity and financial markets than various popular definitions of money will do. Take for instance the period 1991–92. During this period the Dow Jones Industrial Average increased by 11.3% in 1991 and 11.2% in 1992. This increase could not be explained by M2 and M3 definitions. From a rate of growth of 5.5% in 1990 the money M2 rate of growth fell to 3.7% in 1991 and 1.9% in 1992. There is, however, no problem with money AMS. After growing by 3.1% in 1990 this monetary measure grew by 6.3% in 1991 and 11.6% in 1992.

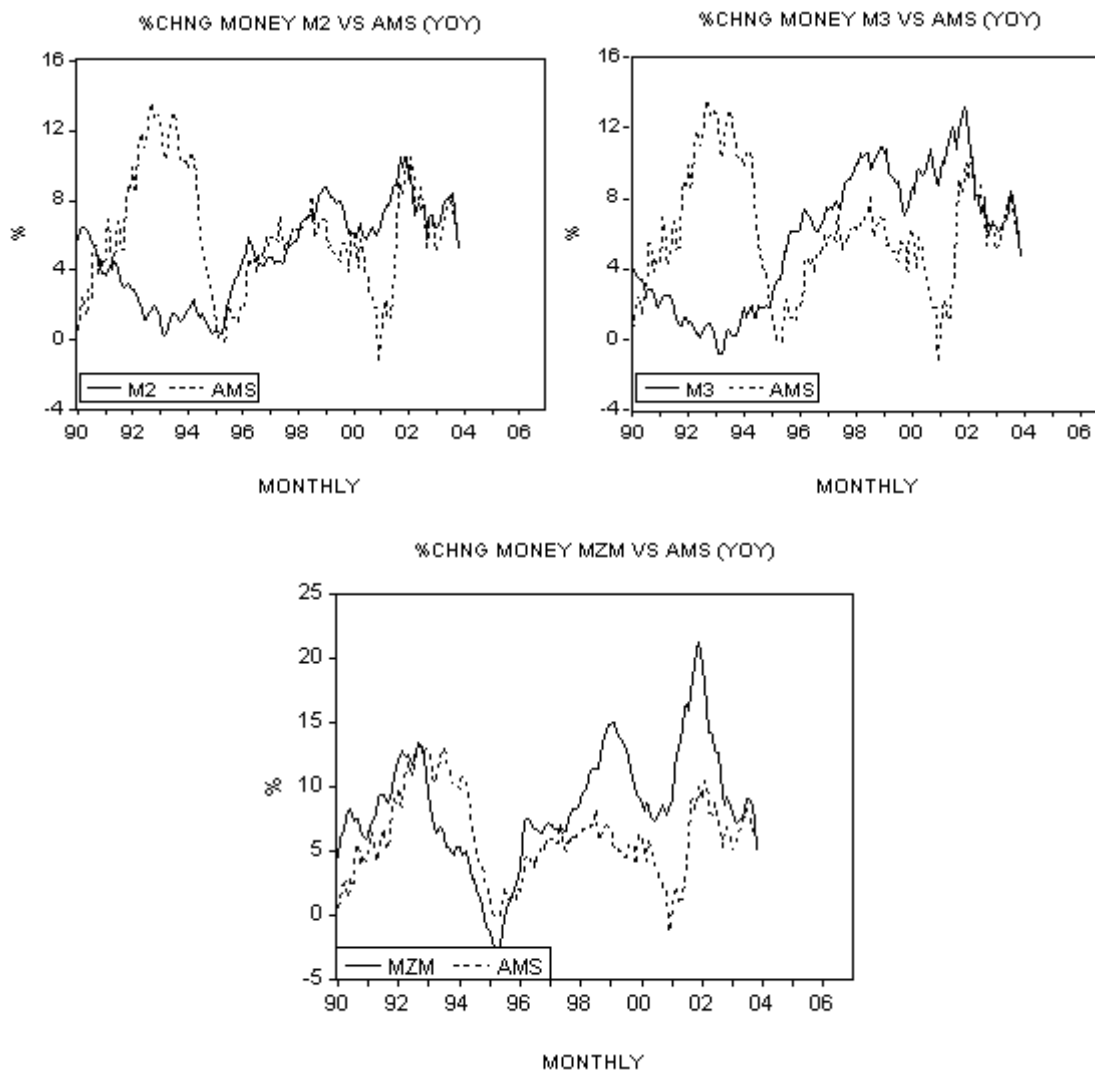
Similar to various popular money supply definitions, money AMS is also presently displaying a visible fall in growth momentum. After rising to 8.2% in July this year, the yearly rate of growth of money AMS fell to 5.8% in November. This visible softening in the growth momentum is likely to undermine various activities that sprang up on the back of the previously rising growth momentum of money AMS. In other words the diversion of investable resources or the diversion of the pool of funding from wealth generating activities toward nonwealth generating activities is likely to ease.

If the fall in the growth momentum of AMS strengthens further this is likely to lead to a severe strangulation of various false activities, also known as a severe economic bust.



Now, it is true that the popular definitions of money are also showing a decline in their growth momentum. However, as we have shown, one cannot rely on these definitions since they provide a misleading account of what money supply is. In the following charts one can observe the discrepancies in the growth momentum of popular definitions of money against money AMS.

Now, even if popular definitions were to produce good historical correlations with various economic data, one runs the risk that these monetary measures will lead to misleading analyses on account of the fact that these definitions are flawed. The only criterion of having confidence in a money supply definition is whether it correctly identifies what money is and where it resides.



Once it is established that the definition is sound one must stick to it regardless of whether it is well correlated with some other economic data or not. The final judge regarding the validity of a money supply definition should not be statistical correlations as such but the economic soundness of the definition. The soundness of a definition however, cannot be established by means of a statistical analysis but only by means of its theoretical soundness.

Frank Shostak is an adjunct scholar of the Mises Institute and a frequent contributor to Mises.org. He maintains weekly data on the AMS for subscribers through [Man Financial, Australia](#). Send him [MAIL](#) and see his outstanding Mises.org [Daily Articles Archive](#).

[1] John B. Carlson and Benjamin D. Keen "[MZM: a monetary aggregate for the 1990s?](#)" Federal Reserve Bank of Cleveland Economic Review, 1996.

[2] Frank Shostak "[The mystery of the money supply definition,](#)" *The Quarterly Journal of Austrian Economics* vol 3, no 4 (Winter 2000). Also see Murray Rothbard "[Austrian Definitions of the Money Supply](#)" and Joseph Salerno "[The True Money Supply: An Austrian Measure of the Supply of the US Medium of Exchange](#)"

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