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## Goodbye to M3

n March 2006, the Board of Governors ceased reporting the monetary aggregate M3, which consisted of M2 plus items such as large time deposits, overnight and term repurchase agreements, and overnight and term Eurodollar deposits.<sup>1</sup>

**Monetary** Trends

One reason was the costs of collecting data on the deposit series special to M3. But the deeper reason is that M3 has not proved essential for policymaking and monetary analysis. M3 never caught on as a popular measure of broad money. Economists prefer to study M2 (only two-thirds the size of M3).<sup>2</sup> This preference may seem puzzling. With such a wide variety of financial instruments, wouldn't it be desirable to focus on as broad a measure of money as possible? And if policymakers don't keep track of growth in those instruments, do they run the risk of overlooking a source of aggregate demand pressure that might undo monetary policy actions?

When the Board began reporting the M3 aggregate in 1980, a widespread answer to these questions may have been "yes." Now, however, it is predominantly "no." This reversal reflects a reconsideration of the two issues involved: (i) the appropriate definition of money and (ii) the implications of diverse financial instruments for the effectiveness of monetary policy.

A broader definition of money is not necessarily always preferable. Most theories of money-holding involve alternative assets that are not money but have some of its characteristics. Monetary analysis needs to draw the line between money and nonmoney assets, and some financial instruments lack sufficient similarities with traditional money to merit inclusion in a monetary aggregate. In some cases, including new assets in the definition of money has merit, especially if backed up by market information on how they're used. But simply pointing to the existence of many financial assets doesn't justify using a very broad monetary aggregate.

How new financial instruments might affect monetary policy concerned economists during the 1960s and 1970s. Some argued that the financial intermediaries competing with traditional banks would erode monetary policy effectiveness. For example, when a monetary policy tightening reduced growth in banks' balance sheets, the new financial intermediaries might take up the business (loans and deposits) lost in the contraction of banking activity and thus frustrate the attempt to influence aggregate demand.<sup>3</sup> In November 1979, at a time when this concern reached its high point, the *New York Times* reported that the Federal Reserve and other central banks had a plan for "controlling the explosive growth of the Eurocurrency markets, which they believe is fueling world inflation"—and Eurocurrency deposits became a key component of the M3 aggregate.

This argument has subsequently lost its influence. Nonbanks are competitors with banks, but it does not follow that they will take up all the business forgone by banks when monetary policy tightens. Modern monetary policy is implemented by open market operations, which trigger interest-rate movements, and the business of banks and nonbanks alike is sensitive to these changes. Therefore, in the wake of the Fed's open market sales, these institutions all have incentives to reduce their expansion. This reduction is an equilibrium reaction to the signals given by prices and yields of financial assets, not a reduction imposed by regulatory fiat.

The "judge and jury" on whether monetary authorities have lost their effectiveness in the face of financial innovation must be whether the Federal Reserve can still use the federal funds rate as an instrument. If the private sector could truly defy a monetary policy tightening, the Fed's attempts to use the federal funds rate would be continually frustrated: the financial system could create money substitutes by just the amount sufficient to offset the Fed's influence on the federal funds market. But the Fed has, in fact, continued to be able to control the funds rate.

The fear of expanded financial intermediation voiced during the 1960s and 1970s has therefore been refuted; likewise, the need to keep track of aggregates as broad as M3 has subsided. Indeed, even in the 1960s the view that financial innovations would wipe out the effectiveness of monetary policy was not universal. As early as 1966, one analyst voiced "substantial doubt on the hypothesis that the growth of financial intermediaries may reduce the effectiveness of monetary policy," instead concluding that "the existence of these institutions should contribute to a broader distribution of the effects of monetary policy."<sup>4</sup> And if that judgment was accurate in 1966, it must hold even more true when applied to the vastly more diversified and liberalized financial environment of forty years later.

## -Edward Nelson

<sup>1</sup> For background on M3, see Anderson and Kavajecz, "A Historical Perspective on the Federal Reserve's Monetary Aggregates: Definition, Construction and Targeting," Federal Reserve Bank of St. Louis *Review*, March/April 1994, pp. 1-31.

<sup>2</sup> "M3 does not appear to convey any additional information about economic activity that is not already embodied in M2 and has not played a role in the monetary policy process for many years" (Board of Governors, 11/10/2005 announcement).

<sup>3</sup> Thomas Mayer defends this view ("Financial Innovation: The Conflict Between Micro and Macro Optimality," *American Economic Review (Papers and Proceedings)*, May 1982, pp. 29-34), whereas Milton Friedman ("Our New Hidden Taxes," *Newsweek*, 4/14/1980) and Michael Woodford ("Monetary Policy in the Information Economy," in *Economic Policy for the Information Economy*, Federal Reserve Bank of Kansas City, 2001, pp. 297-370) dissent.

<sup>4</sup> See Hamburger, "The Demand for Money by Households, Money Substitutes, and Monetary Policy," *Journal of Political Economy*, December 1966, pp. 600-623; quotation from p. 622.

Views expressed do not necessarily reflect official positions of the Federal Reserve System.