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# Has Bernanke broken his promise to Friedman?

**The monetary policies of the Federal Reserve have helped to avoid a second Great Depression, but Bernanke's emphasis on credit has been misguided, says Tim Congdon.**

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On 8 November 2002 the University of Chicago organised a 90<sup>th</sup> birthday reception in honour of Milton Friedman. Ben Bernanke, who had then been a governor of the Federal Reserve for four months, was a guest speaker. He concluded his remarks by addressing Friedman, "Regarding the Great Depression. You're right, we [ie, the Fed] did it. We're very sorry. But, thanks to you, we won't do it again."

Now that Bernanke has been chairman of the Fed in a four-year period widely regarded as the most difficult for the American economy since the 1930s, the question has to be asked, "Has he kept his promise to Friedman?" For the purpose of discussion, the promise is taken here to have committed the Fed in three ways first, to prevent the recurrence of the Great Depression; second, to apply Friedman's understanding of monetary economics in the Fed's policy-making approach; third, to respect at least the spirit of Friedman's main policy prescription, that the growth of the quantity of money should be stable over time.

Each aspect of the commitment merits discussion.

In his November 2002 remarks Bernanke paid tribute to Friedman and Schwartz's classic study, *A Monetary History of the United States, 1867-1960*. In his words, "What I take from their work is the idea that monetary forces, particularly if unleashed in a destabilising direction, can be extremely powerful." Bernanke appeared to offer an enthusiastic endorsement of Friedman and Schwartz's work, and to agree with the main themes of their monetary theorising. As will become clear as the discussion proceeds, his true position is more ambivalent.

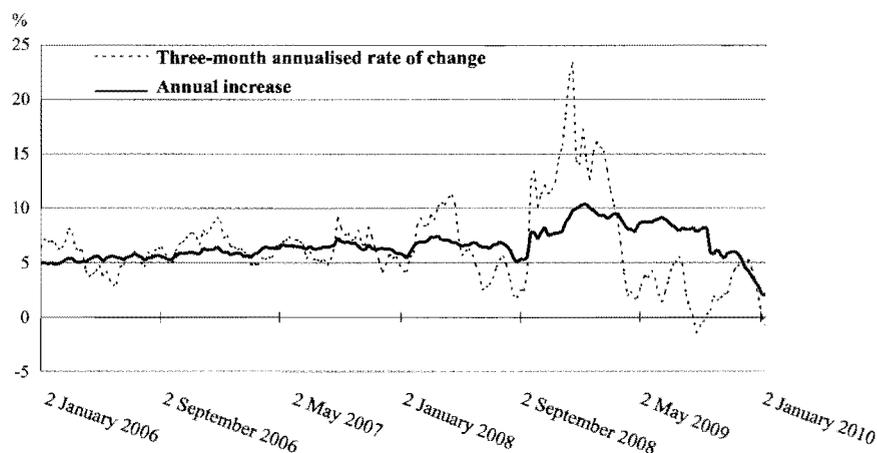
A central finding of Friedman and Schwartz's study was that an extraordinary collapse in the quantity of money, not an inherent failing of the capitalist system, was the main cause of the US "Great Contraction" (as they termed it) between 1929 and 1933. Their favoured measure of money fell on a peak-to-trough basis by almost 40% in less than four years (ie, typically at an annual rate of about 10%), from \$48.2bn in October 1929 to \$29.7bn in April 1933. According to Friedman and Schwartz, the critical failure in operational terms was that the Fed did not initiate sufficiently expansionary open market purchases of securities (ie,

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purchases to expand the quantity of money) until too late. Bernanke's promise to Friedman had one clear interpretation. If he were at the helm in the Fed, a similar plunge in the quantity of money would not be allowed to happen.

What, then, has been the behaviour of the quantity of money since Bernanke became Fed chairman in February 2006? Unfortunately, a thorny technical issue is basic to any analysis: "Which money aggregate is most relevant to assessing the macroeconomic situation?" In their *Monetary History*, Friedman and Schwartz recognised that this topic could be controversial, but were explicit about their own preferences. To quote, "we have found in our work that a concept of money which includes both categories of deposits [ie, sight and time deposits] often displays a more consistent relationship to other economic magnitudes than a concept which excludes time deposits". In other words, their predilection was for M2 (which includes time deposits) over M1 (which does not). In his subsequent career Friedman was indeed a fairly consistent supporter of M2.

**Figure 1 The Bernanke flip-flop?**



Note: sharp acceleration in M2 money growth in autumn 2008 and abrupt slowdown from January 2009 (Data are weekly, last value 11 January 2010).

Turning to the behaviour of M2, the above chart – with both the three-month annualised growth rate and the annual growth rate – sets out the key numbers. The annual rate of M2 growth was fairly stable at about 5% a year in the two years from early 2006, if with some tendency to rise. It then slowed markedly in 2008, a development better illustrated by the three-month annualised rate of change than by the annual figure. In fact, by August 2008 the three-month annualised rate of change had dropped to almost zero. With the escalation of the financial crisis in September 2008, and in particular with the bankruptcy of Lehman Brothers and public intervention in AIG, an insurance company, the trajectory of M2 changed abruptly. Heavy purchases by the Fed of commercial paper and, to a lesser extent, of other assets caused a leap in M2. (In 2009 the commercial paper was sold and replaced by other securities, especially mortgage-backed paper.) For a few weeks in late 2008 the annualised three-month rate of M2 increase was in the 15% to 25% area. Given the widespread fears then of another Great Depression, Friedman would surely have approved of these highly expansionary open market operations.

But what would he make of the subsequent record? As the chart shows, money growth may have flipped up in the immediate aftermath of the Lehman crisis, but then it flopped. Since the end of January 2009 the growth of M2 has been negligible. The annualised rate of increase between 26 January 2009 and the latest available figure at the time of writing (11 January 2010) is a mere 1.7%. Sure enough, in 2009 the Fed persisted with a range of programmes – including some programmes of asset acquisition – in order to help the economy. But these programmes were barely powerful enough to outweigh the contractive effects on M2 of the shrinkage of banks' risk assets. This shrinkage was partly driven by newly imposed regulatory requirements which had the Fed's support, even if the support was only tacit. The Fed therefore participated in the regulatory push to reduce the amount of risk in banks' balance sheets. But the removal of risk from bank balance sheets has inevitably led to a slowing of asset acquisition and hence of monetary expansion. Given that an imperative in American public policy in 2009 was to lift the economy out of the worst downturn for over 70 years, the feeble growth of M2 was a big disappointment. In early 2010 it remains a major source of worry.

The United States does not face a second Great Depression. That has been avoided, at least in part, because of Bernanke's support for expansionary asset purchases in late 2008. But ought more to have been done to raise the rate of money growth last year? Particularly if it had worked with the US Treasury to organise large buybacks of Treasury securities, the Fed could have acted to boost money growth. Can it be argued that, by not doing more to increase the money supply, Bernanke broke the terms of his 2002 promise to Friedman?

As we have seen, Friedman liked broad measures of money, with M2 his pet aggregate. However, a case can be made that the closest present-day equivalent of the money measure used in *A Monetary History* is in fact M3. M3 was introduced as an official money aggregate in 1971, with a back run of data to 1959. At that start of the M3 series (ie, 1959) the differences between it and M2 were minor. M3 included, but M2 excluded, large time deposits and Eurodollar deposits held by US residents. Indeed, a case could be made that M3 was then and remains today a much better approximation to the notion of a money aggregate encompassing all sight and time deposits than M2.

**Bernanke and  
Friedman's  
approach to  
money**

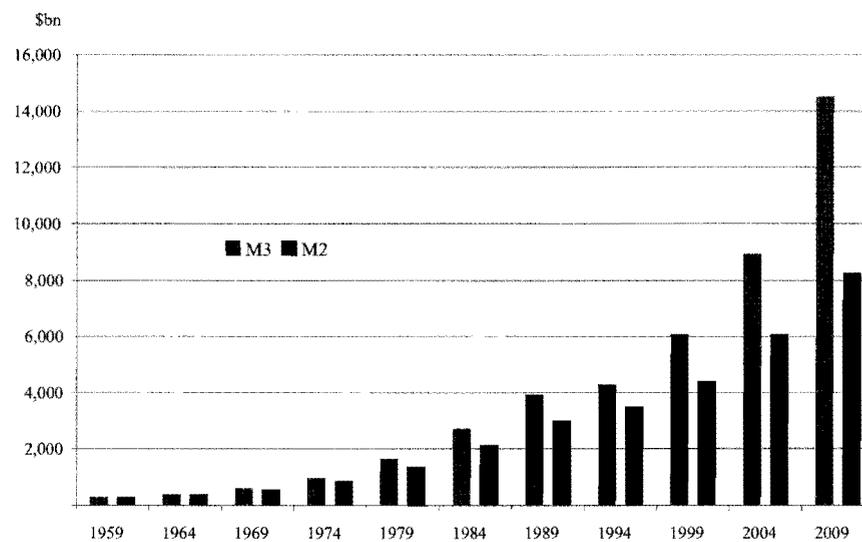
In particular, the exclusion of "large" time deposits from M2 seems arbitrary and odd. The Fed's procedure is to exclude all deposits with an opening value in excess of \$100,000 from M2 money. So a deposit of \$90,000 is "money", but one of \$110,000 is not. Does one need to point out that this is absurd? An obvious comment is that – as nominal incomes and wealth grow – a rising proportion of deposits will have an opening value above \$100,000 and so will be excluded from M2, with the result that M3 will expand relative to M2. Undoubtedly, an ever-increasing proportion of deposits in the hands of companies and financial institutions are no longer eligible for inclusion in M2. For those economists who believe – not unreasonably – that corporate and financial-sector money balances have an important bearing on macroeconomic conditions, the M2 money measure has become less interesting and useful than it was when Friedman and Schwartz used it in their work on the Great Depression.

Several participants in financial markets have said that there is a genuine need for M3 data. But in November 2005, when Greenspan was still chairman, the Fed announced that it would stop publishing M3 numbers. According to van Overtveldt in his book, *Bernanke's Test*, the decision to end M3 was a mistake that was "as much attributable to Bernanke as Greenspan". His apparent aversion

to M3 suggests that Bernanke looks at money data in a very different spirit from Friedman. As his book of essays on the Great Depression focused on the M1 measure when it referred to money at all, Bernanke's approach was clearly divergent from that of Friedman and Schwartz in their *Monetary History*.

How important has the hiding of M3 since early 2006 been to American monetary policy over the last four years? The chart below suggests that it has been hugely important. The Fed may have stopped publishing M3 numbers, but its staff continues to prepare and release data on nearly all its main components. A private research company, Shadow Government Statistics, has therefore been able to compile an estimate – or anyhow a good guesstimate – of monthly M3 data. On this showing the M3 money aggregate has seen a dramatic boom and bust in the last few years. It started the Bernanke chairmanship with a single-digit annualised six-month growth rate, but this growth rate moved up to low double digits in early 2007, and to the teens in late 2007 and early 2008.

**Figure 2 US M2 vs M3**



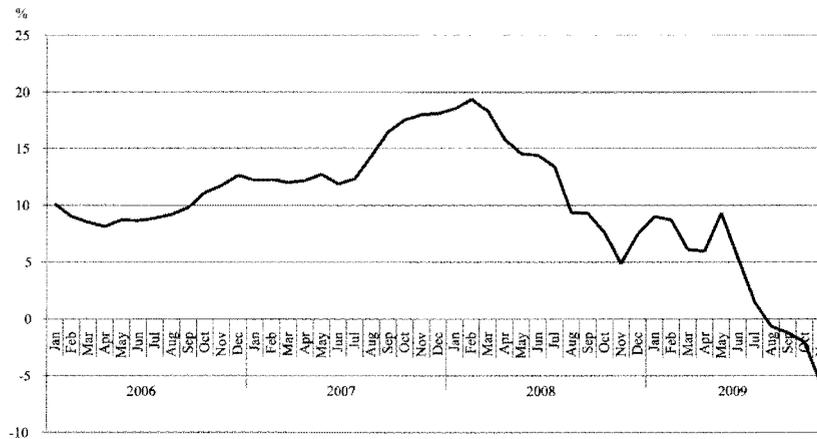
Note: In the early 1960s M3 was only a few percentage points above M2; it now exceeds M2 by 75%. But the Fed takes no interest in M3.

Monetary economists who favour broad money – and I have argued that they included Milton Friedman when he was alive – would surely have blown the whistle about excessive money growth as early as mid-2007, if they had known what was going on. (Friedman died in November 2006.) At any rate, the Fed became concerned in late 2007 and early 2008 about the need to dampen inflation pressures, which were becoming more evident. Money growth started to decelerate. The subsequent plunge in M3 has been startling. With the *level* (not *the growth rate*) of M3 down by about 3% in the six months to November 2009 (ie, at an annualised rate of 6%), the present rate of contraction of US broad money is unprecedented since the 1930s. Questions must be raised about the management of the money supply – or rather the lack of it – during the Bernanke chairmanship.

In a celebrated paper on the so-called “credit channel of monetary policy transmission”, co-authored with Mark Gertler and published in the 1995 *Journal of*

*Economic Perspectives*, Bernanke said that the relationship between money and the economy was “a black box”. In a number of other places Bernanke has proposed that credit, as measured by changes in bank lending to the private sector, are just as important in understanding the economy as changes in the quantity of money.

**Figure 3 M3 under Bernanke**



Note: Chart shows annualized six-month percentage growth rate of M3, where the M3 series is that published by the Shadow Government Statistics research company after February 2006.

Friedman's position here was almost the exact opposite of Bernanke's. He spent most of his career condemning economists who – in his view – placed too much emphasis on credit and so failed to understand how money affected asset prices and economic activity. For example, he had a decades-long tussle with James Tobin, a Nobel-prize winning American Keynesian, on precisely this subject. In another joint work, their 1982 volume on *Monetary Trends in the United States and the United Kingdom*, Friedman and Schwartz pooh-poohed Tobin's focus on the monetisation of commercial lending, which Tobin saw as a vital first-round impact of bank credit on spending. Their rebuttal was that money was turned over many times a year. They wrote: “...remember that the transactions velocity of money may well be 25 to 30 or more times a year, to judge from the turnover of bank deposits. So the first-round effect covers at most a two-week period, whereas the money continues circulating indefinitely.”

In short, Bernanke has different views from Friedman on both the merits of **Stable money** alternative money aggregates and the relative significance of credit and money. **growth?** Further, these differences have been of great practical importance in the crisis. When orchestrating the large purchases of commercial paper in late 2008, Bernanke described the operations as “credit easing”, not “quantitative easing” (ie, not designed to boost the *quantity* of money). He wanted the expansionary asset purchases to lower credit spreads and did not see their key impact as being on the quantity of money. By contrast, Friedman's argument for stimulatory open market operations always pivoted on the boost to the money supply.

Despite the length and intellectual turmoil of his academic career, Friedman held to one theme throughout. This was that stable growth of the quantity of money – stable growth of a broadly-defined quantity of money, let it be repeated – would contribute to better macroeconomic outcomes. Famously, Friedman advocated that the Fed

should pursue a “constant money growth rule”, with its decisions motivated by the objective of keeping money growth more or less the same year after year. In his final paper – a note given in 2006 for the *festschrift* of his former pupil, David Laidler – he referred to the variability of M2 growth as an influence on variability in output. He wanted to provide a general explanation for the improvement in macroeconomic performance in the preceding 15 years, the so-called Great Moderation. The final paragraph of the 2006 note was:

The collapse of the variability of output is clearly an effect of the collapse of monetary variability. In my opinion, the same results could have been obtained at any earlier time and can continue to be achieved in the future. What is involved is not a trade-off but direct cause-effect.

It follows that, if Bernanke were loyal to Friedman’s ideas about monetary policy, he would try to prevent undue fluctuations in M2 and M3 growth. What in fact has happened to the variability of M2 and M3 growth since 2006? The answer is that money growth has been highly volatile, particularly with the M3 aggregate. This is obvious from the chart above on M3 growth, but it also emerges clearly if more formal estimates of the standard deviation of quarterly money growth rates are calculated. In fact, the volatility of M3 growth was probably greater towards the end of the first decade of the 21<sup>st</sup> century than at any time since the Great Depression.

**Bernanke has not honoured his promise** What is the conclusion? To give Bernanke his due, the large-scale purchases of commercial paper in late 2008 were an astute and appropriate operation to stop severe deflation. In that sense the Fed has not repeated the “it”, the gross mismanagement of money in the Great Depression, which he discussed at Friedman’s 90<sup>th</sup> birthday celebration. However, in the last few years American monetary policy has otherwise been conducted in almost blatant disregard of Friedman’s research messages. Friedman emphasised the benefits of stable broad money growth, but M3 money growth under Bernanke has been more erratic than at any time since the 1930s. Whereas Friedman disliked references to credit variables, Bernanke downplays money aggregates and instead concentrates on credit. Most damning of all, the Fed allowed the growth of both measures of broad money, M2 and M3, to stall in 2009, despite the most difficult and sluggish macroeconomic conditions since the Great Depression.

To say that Bernanke has broken the promise he made to Milton Friedman in November 2002 may be too harsh; to suggest that he has not kept to the underlying spirit of that promise is surely fair. What should he and his colleagues on the Federal Open Market Committee have done? They might at least have considered adopting the Bank of England’s approach, with massive purchases of medium- and long-dated government securities *from non-banks* in order – consciously and frankly – to increase the quantity of money on the broad definitions. This may have too monetarist a flavour for some, but it is worth recalling Keynes’ advice to the Fed via his letter to President Roosevelt in *The New York Times* on 31 December 1933. He wanted the Fed to imitate the Bank of England’s successful conversion of War Loan in 1932 which, in his view, had marked “the turn of the tide” in Britain’s battle with depression. He argued that large Federal Reserve purchases of “long-dated [Treasury] issues” might “be effective in a few months”. Indeed, to quote Keynes, “I attach great importance to it.” Might a similar move on the Fed’s part in 2010 lead, at last, to an overdue and welcome fall in American unemployment? □