



Would Quantitative Easing Sooner Have Tempered the Financial Crisis and Economic Recession?

Daniel L. Thornton, *Vice President and Economic Adviser*

The Federal Reserve initially responded to the financial crisis by reducing its target for the federal funds rate by 325 basis points from September 17, 2007, to April 30, 2008. On August 17, 2007, the Fed also reduced its primary credit rate from 100 basis points above the funds rate target to 50 basis points above the target and increased the maximum term for primary credit borrowing to 30 days. The primary credit rate was reduced to 25 basis points above the target on March 17, 2008. The Fed also introduced several new lending facilities: The Term Auction Facility (TAF) and temporary currency swaps with the European Central Bank and the Swiss National Bank on December 12, 2007, and the Primary Dealer Credit Facility on March 16, 2008.¹

Loans to depository institutions and central banks increased by nearly \$250 billion from late December 2007 to the week ending September 10, 2008. The Fed sold a comparable quantity of Treasury securities to offset (“sterilize”) the effect of this lending on the monetary base and, hence, the total supply of credit. Sterilized lending causes the unchanged total supply of credit to be reallocated to the borrowing institutions.² The Fed sterilized its lending for two reasons. First, it believed that market imperfections prevented some institutions, primarily banks and other depository institutions, from obtaining credit. It believed that the reallocation of credit to these institutions would mitigate the effect of the financial crisis on bank lending. Second, the Fed was implementing monetary policy by setting a target for the effective federal funds rate. The Fed was concerned that such a large increase in the supply of credit would cause the funds rate to fall below the Federal Open Market Committee’s (FOMC’s) target.

The effectiveness of these actions is questionable for at least three reasons. First, despite the 325-basis-point reduction in the funds rate target, longer-term rates, which are widely regarded as important for consumer and business spending decisions, declined much less. Indeed, some important lending rates remain essentially unchanged. Second, economic and finance theory suggests that reallo-

cating credit will have no positive macroeconomic effects unless financial markets allocate credit inefficiently; and a large body of empirical evidence suggests that financial markets are highly efficient. Thus, the Fed’s reallocation of credit might have had, at most, a minimal positive effect. Indeed, the effect could be negative if the credit allocation caused by the Fed’s activity was less efficient than the previous market allocation. Third, many analysts argued that the financial crisis was caused by a shortage of liquidity—markets were “frozen up.” Sterilized lending cannot deal with this problem because it does not increase the total quantity of credit available to the market.

Would financial markets and the economy have been better off if the Fed pursued a policy of quantitative easing sooner?

It is perhaps not surprising then that economic activity and financial market conditions deteriorated in spite of the cumulative 325-basis-point cut in the funds rate target and the Fed’s nearly \$250 billion reallocation of credit. The unemployment rate increased from 4.9 percent in December 2007 to 6.2 percent in August 2008, and real output declined at a 0.72 percent rate in the first quarter of 2008 and increased at an anemic 1.46 percent rate in the second quarter. Moreover, in August 2008 most forecasters were anticipating anemic growth in the last half of the year. Financial market conditions also continued to deteriorate. Bear Stearns was bailed out by JP Morgan with the assistance of the Fed on March 14, Fannie Mae and Freddie Mac were placed in government receivership on September 7, Lehman Brothers declared bankruptcy on September 15, and American International Group (AIG) failed on September 16.

The failures of Lehman Brothers and AIG resulted in a monumental increase in the Fed’s existing lending programs. For example, TAF and primary credit lending increased

from about \$180 billion for the week ending September 10, 2008, to about \$510 billion for the week ending November 12, 2008. Moreover, the Fed introduced a series of new lending programs. Unable to sterilize such massive lending, the monetary base increased from about \$850 billion for the week ending September 10, 2008, to about \$1.75 trillion for the week ending January 7, 2009.³ The monetary base has remained at about this level since then.

Since this so-called quantitative easing the economy has shown marked signs of improving. Indeed, several analysts have suggested that the recession ended in June 2009. Moreover, a variety of indicators suggest that the financial crisis has abated. Indeed, banks have begun repaying loans from the Troubled Asset Relief Program (TARP), which was approved on October 2, 2008.

The apparent failure of the Fed's 325-basis-point cut in its fund rate target and its credit reallocation program and the apparent success of the Fed's quantitative easing raises an interesting question: Would financial markets and the economy have been better off if the Fed pursued a policy of quantitative easing sooner? Unfortunately, we cannot conduct a controlled experiment, so we can never be sure of the answer. Nevertheless, the financial crisis was characterized by a shortage of credit, which suggests that had the Fed initially pursued a policy of increasing the total supply of credit (the monetary base), financial markets participants would have been better able to adjust to the decline in house prices. The more than doubling of the monetary base was a consequence of the increased need for credit in

the wake of the failures of Lehman Brothers and AIG, which the Fed was unable to sterilize. Nevertheless, the Fed could have achieved the same result by actively purchasing a variety of financial assets, as it is currently doing. Who knows: Had the Fed significantly increased the supply of credit sooner, the failures of Bear Stearns, Lehman Brothers, and AIG may have been avoided and, so too, the need for the TARP.

A possible lesson from these events is that financial markets and the economy might be better off if, in future financial crises, the Fed first increases the supply of credit available to the market. Additional actions can be taken if there is evidence that quantitative easing alone is insufficient. Of course, this means that the Fed must be willing to promptly, albeit temporarily, abandon its funds rate target. The inflationary consequences of quantitative easing can be mitigated by informing the market that the increased monetary base will be reduced systematically at the first signs that the economy is improving and the financial market crisis is abating. ■

¹ For a complete and up-to-date financial market crisis timeline, go to <http://timeline.stlouisfed.org/pdf/CrisisTimeline.pdf>.

² For details, see Thornton, Daniel L. "The Fed, Liquidity, and Credit Allocation." *Federal Reserve Bank of St. Louis Review*, January/February 2009, 91(1), pp. 13-21; <http://research.stlouisfed.org/publications/review/09/01/Thornton.pdf>.

³ Not surprisingly, given this large increase in the supply of credit, the effective federal funds rate declined precipitously. The FOMC reduced its funds rate target to between zero and 25 basis points on December 16, 2008.