

## Is More QE in Sight?

The recent U.S. financial crisis—characterized by financial institution failures, heightened fear of counterparty risk, and worldwide coordinated central bank intervention to reduce financial market stress—is widely regarded to have ended by March 2009. Since its end, the Federal Open Market Committee (FOMC) has focused on policy to accelerate the recovery of economic activity. Prominent among the FOMC’s policies has been the “Large Scale Asset Purchase” program (LSAP), a quantitative easing (QE) policy designed to reduce long-term market interest rates. The program called for the Federal Reserve to purchase \$300 billion of long-term Treasury securities, approximately \$175 billion of federal agency debt, and up to \$1.25 trillion of agency-guaranteed mortgage-backed securities, concluding in March 2010.<sup>1</sup> The recent slowing in the pace of economic recovery has raised discussion of the need for a second LSAP-style program.

Most analysts have concluded that the LSAP successfully reduced long-term market interest rates. Two recent studies, for example, suggest that the LSAP reduced yields on 10-year Treasury securities by as much as 100 basis points below levels that otherwise would have prevailed. In addition, the program appears to have reduced interest rates abroad.<sup>2,3</sup>

How, exactly, do LSAP-style programs succeed? Two elements are necessary: Long-term market rates must decrease and aggregate spending must respond. Consider the first: Asset purchases are asserted to affect market rates by a “portfolio balance” effect. A typical analysis begins with the public holding two assets that differ only in time to maturity. Holders of the long-maturity asset risk a decrease in the asset’s price if/when market interest rates increase. When the Fed purchases such assets from the public, the extent of this interest rate risk is reduced and, perhaps, market interest rates will decrease by the size of the now-smaller risk premium. Formal models of this effect, however, usually require an ad hoc market friction. In a recent analysis, Hamilton and Wu consider an experiment in which a central bank sells its holdings of short-term Treasury securities and purchases an equal amount of long-term Treasuries.<sup>4</sup> In their model, short-term yields rise and long-term yields fall. This result, however, requires at least two distinct groups of investors, each of which strongly prefers either short- or long-term assets

*even after allowing for differences in yields.* Further, in the real world, the Fed’s actions differ somewhat from those in the model: Since March 2009, the Fed has paid for purchased assets by creating new deposits at the Federal Reserve Banks, not by the sale of existing short-term assets. Only banks and a few other financial institutions are permitted to hold deposits at the Fed, while Treasury securities are widely held.

Second, aggregate demand must respond to lower long-term interest rates—a sustained economic rebound requires recovery in household spending and business investment.<sup>5</sup> This aspect is more uncertain. Recent surveys suggest that business investment spending is tepid due to uncertainty regarding future demand, not high long-term interest rates—indeed, large businesses are borrowing readily in credit markets at highly favorable terms. Lending to households and small businesses remains constrained by increased lender caution about risk tied to uncertainty regarding future demand, sales, and income. Neither sector is hampered by excessively high long-term interest rates.

—Richard G. Anderson

<sup>1</sup> Here, “agency” refers to three organizations: FNMA (Federal National Mortgage Association, also referred to as Fannie Mae), FHLMC (Federal Home Loan Mortgage Corporation, also known as Freddie Mac), and GNMA (Government National Mortgage Association, also referred to as Ginnie Mae). GNMA is part of the U.S. Department of Housing and Urban Development. FNMA and FHLMC, government-chartered but privately owned corporations, were placed into federal receivership on September 6, 2008.

<sup>2</sup> Gagnon, Joseph; Raskin, Matthew; Remache, Julie and Sack, Brian. “Large-Scale Asset Purchases by the Federal Reserve: Did They Work?” Staff Report No. 441, Federal Reserve Bank of New York, March 2010; [www.newyorkfed.org/research/staff\\_reports/sr441.pdf](http://www.newyorkfed.org/research/staff_reports/sr441.pdf).

<sup>3</sup> Neely, Christopher J. “The Large Scale Asset Purchases Had Large International Effects.” Working Paper No. 2010-018A, Federal Reserve Bank of St. Louis, July 2010; <http://research.stlouisfed.org/wp/2010/2010-018.pdf>.

<sup>4</sup> Hamilton, James D. and Wu, Jing (Cynthia). “The Effectiveness of Alternative Monetary Policy Tools in a Zero Lower Bound Environment.” Unpublished manuscript, University of California, San Diego, September 1, 2010; <http://dss.ucsd.edu/~jhamilto/zlb.pdf>.

<sup>5</sup> Bernanke, Ben. “The Economic Outlook and Monetary Policy.” Presented at a symposium sponsored by the Federal Reserve Bank of Kansas City, “Macroeconomic Challenges: The Decade Ahead,” Jackson Hole, Wyoming, August 27, 2010; [www.federalreserve.gov/newsevents/speech/bernanke20100827a.htm](http://www.federalreserve.gov/newsevents/speech/bernanke20100827a.htm).