



The Downside of Quantitative Easing

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

At its November meeting the Federal Open Market Committee (FOMC) decided to engage in a second round of quantitative easing called QE2 (i.e., quantitative easing in the form of large-scale purchases of U.S. Treasury securities) by purchasing an additional \$600 billion in longer-term government securities by the end of the second quarter of 2011. In a recent *Economic Synopses* essay, I reviewed the transmission mechanism of monetary policy to evaluate the potential effectiveness of QE2.¹ That analysis suggested several reasons why QE2 might have little or no effect on output, employment, and inflation or inflation expectations. This essay analyzes several potential dangers associated with the FOMC's previous quantitative easing actions that will be exacerbated by the decision to expand its portfolio further.²

The first potential danger is that quantitative easing increases the likelihood that long-run inflation could increase well above the FOMC's implicit inflation objective of about 2 percent. As a result of the Committee's previous quantitative easing measures, banks currently hold about \$1 trillion in excess reserves. As I have noted elsewhere, the supply of money (M1) can be increased massively with a relatively small reduction in excess reserves because the effective reserve requirement is at a historically low level.³ Hence, the current level of excess reserves could create a massive increase in the money supply should banks significantly increase their lending or investing. QE2 only increases this potential. Few analysts doubt that such a massive increase in the money supply would be inflationary.

Currently, banks are content to hold massive amounts of excess reserves. There are a number of possible reasons for this, including (i) weak loan demand associated with regulatory and cost uncertainty and a somewhat anemic recovery; (ii) capital ratios below their desired or required levels; and (iii) unprofitable lending due to interest rates at or below the cost of capital, thereby encouraging banks to hold excess reserves rather than make loans.⁴ The impediments to bank lending will surely dissipate as the economy recovers. Should banks begin to significantly expand their lending and investing, the FOMC would have to take

extreme actions to avoid a marked acceleration in money growth. The FOMC has two options. They can reduce the supply of excess reserves by selling large quantities of securities (either through outright sales or by continuously rolling over temporary sales using reverse repurchase agreements [repos]). Alternatively, the FOMC could increase the interest rate it pays banks to hold excess reserves to a level competitive with the risk-adjusted rate banks could earn by making loans and investments—thereby preventing the money supply from increasing.⁵

Current excess reserves could create a massive increase in the money supply if banks significantly increase their lending or investing.

If the Fed can remove the reserves when the time comes or neutralize their effect on the money supply by paying banks interest to hold them, why do they constitute such a serious inflation risk? I believe there are at least four reasons. The first is that, historically, there has been a lag between accelerations in money growth and subsequent inflation. Consequently, inflationary pressures associated with excessive money growth could build before the FOMC either sells securities and/or increases the interest rate it pays on excess reserves sufficiently to significantly curtail money growth.

A second reason is the considerable disagreement among economists and policymakers about whether and to what extent money growth per se is inflationary. In the macroeconomic model commonly used in analyses of monetary policy, inflation is determined by inflation expectations and the gap between actual and "potential" output. The output gap is currently estimated to be very large and negative, so proponents of this model are unlikely to be concerned about rapid growth of the money supply until inflation begins to increase. Even then, the rise in inflation can initially be attributed to special factors (e.g., an increase in

oil prices that could be viewed as temporary) and not a persistent rise in inflation above the FOMC's inflation objective. This possibility further increases the likelihood that the FOMC may be slow to respond.

A third reason for concern is that employment growth is uncharacteristically slow during this recovery. At 15 months past the recession's end, employment is only slightly above its post-recession trough. Consequently, employment likely will remain below its pre-recession peak much longer than it did after either of the two previous recessions.⁶ If employment remains significantly below its pre-recession peak and the unemployment rate stays historically high, the FOMC may be particularly reluctant to move quickly if money growth were to accelerate sharply or, perhaps, even if inflation were to rise somewhat above its implicit inflation objective.

A fourth reason is related to the third. Specifically, the FOMC may be concerned about the adverse effects on the financial market from selling large amounts of government securities quickly. This concern will make the FOMC less likely to engage in large-scale asset sales and is likely to be intensified if employment growth is slow and the unemployment rate high.

Of course, the FOMC could attempt to impound the excess reserves by paying market interest rates to banks for holding them. However, this could be very expensive and significantly reduce the Fed's earnings. Indeed, because the banks would be making loans that are not default-risk-free while the Fed would be earning interest on default-risk-free government debt, it is possible that the Fed would have to pay a higher rate to entice banks to hold reserves than it would earn on its holdings of government securities. Moreover, paying banks a large amount of interest to hold reserves might be viewed as providing banks with an unwarranted and undeserved subsidy.

Given that additional quantitative easing may have only modest effects on economic growth, employment, or inflation and the potential to significantly exacerbate the FOMC's problems when the time comes to restore its balance sheet to a more normal configuration, it is easy to understand the considerable disagreement about the desirability of such a policy. At least one policymaker, Kansas City Fed president Thomas Hoenig, believes the potential benefits are likely to be smaller than the potential costs.⁷ ■

¹ Thornton, Daniel L. "Would QE2 Have a Significant Effect on Economic Growth, Employment, or Inflation?" Federal Reserve Bank of St. Louis *Economic Synopses*, No. 29, October 13, 2010; <http://research.stlouisfed.org/publications/es/10/ES1029.pdf>.

² For two other potential problems not discussed here, see Plosser, Charles I. "Economic Outlook." Presented to the Greater Vineland Chamber of Commerce, Vineland, NJ, September 29, 2010; www.philadelphiafed.org/publications/speeches/plosser/2010/09-29-10_vineland-chamber-of-commerce.cfm.

³ Thornton, Daniel L. "Negating the Inflation Potential of the Fed's Lending Programs." Federal Reserve Bank of St. Louis *Economic Synopses*, No. 30, July 1, 2009; <http://research.stlouisfed.org/publications/es/09/ES0930.pdf>. For example, the effective reserve requirement is approximately 5 percent. Consequently, a reduction in excess reserves of \$100 billion could increase M1 by as much as \$2 trillion; however, the increase would occur if the public significantly increased its holding of currency.

⁴ See Wheelock, David C. "The Monetary Base and Bank Lending: You Can Lead a Horse to Water..." Federal Reserve Bank of St. Louis *Monetary Trends*, September 2010; <http://research.stlouisfed.org/publications/mt/20100901/cover.pdf>.

⁵ The Fed has also considered paying banks to hold reserves in the form of "term deposits," which is, in effect, very similar to paying interest on excess reserves.

⁶ Employment did not return to its pre-recession peaks for 23 and 39 months, respectively, after the 1990-91 and 2001 recessions.

⁷ Hoenig, Thomas M. "The Federal Reserve's Mandate: Long Run." Presented at the National Association of Business Economists Annual Meeting, Denver, Colorado, October 12, 2010; www.kansascityfed.org/speechbio/hoenigpdf/nabe-hoenig-10-12-10.pdf.