



## How *Not* to Reduce Excess Reserves

David C. Wheelock, *Vice President and Banking and Financial Markets Adviser*

The Federal Reserve's actions to support financial markets and the broader economy have resulted in a large increase in bank reserves—both total reserves and reserves held in excess of legal requirements—since September 2008.<sup>1</sup> Excess reserves have risen from an average of less than 5 percent of total reserves during the 5 years ending in August 2008 to more than 90 percent since November 2008. Many observers contend that the large increase in excess reserves poses a significant inflation risk. A look back at a similar episode during the 1930s provides some insights about how not to reduce excess reserves.

As in the current situation, excess reserves grew rapidly and became a high percentage of total reserves during the mid-1930s. Depositor runs on banks and gold outflows caused reserves to contract sharply between 1929 and early 1933; subsequently, reserves began to grow in 1933 with the introduction of federal deposit insurance. Gold inflows increased reserves even more rapidly during 1934-36 and banks built up substantial excess reserves. By 1935 excess reserves comprised more than 50 percent of total reserves.

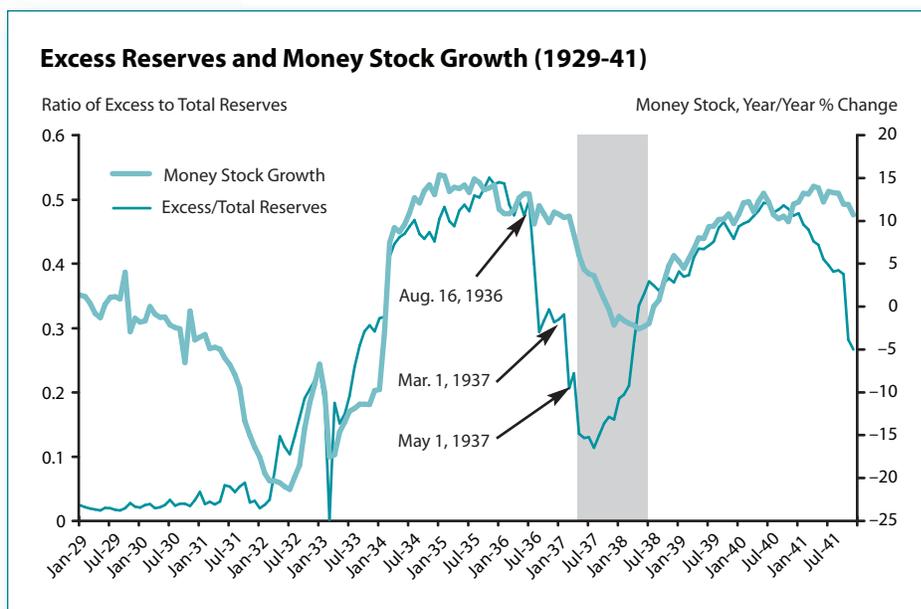
Federal Reserve officials viewed excess reserves as a potential source of inflation because they could support a rapid increase in bank lending. In 1936, officials decided to increase reserve requirements in three steps—from 13 percent to 26 percent on transactions deposits and from 3 to 6 percent on time deposits.<sup>2</sup> An alternative means of reducing excess reserves—selling securities in the open market—was not an option because, by July 1936, the excess reserves (\$2.9 billion) exceeded the size of the Fed's securities portfolio (\$2.4 billion).

The chart shows the dates of each increase in reserve requirements. The policy was successful in reducing both total excess reserves and the ratio of excess to total reserves. However, interest rates also rose, money stock growth

declined sharply, and in May 1937 the economy entered a recession (the shaded region in the chart represents the recessionary period).

**Experience demonstrates that raising reserve requirements is surely *not* the best way to eliminate excess reserves.**

In hindsight, the impact of the hike in reserve requirements is not surprising. In raising the amount of non-interest-earning balances that banks were required to hold against each dollar of deposits, the hike encouraged banks to reduce lending in an effort to reduce deposits, which caused money stock growth to fall. The impact might have been less constrictive if the Fed had drained an equivalent amount of reserves by selling securities because the cost of holding deposits would have been unaffected. The impact might still have been large, however, if banks held excess reserves mainly as protection against depositor runs, rather than because they lacked profitable lending opportunities.



Much has changed since the 1930s. However, during the recent crisis, banks at times have found borrowing difficult or expensive; consequently, their desire for liquid assets—including excess reserves—may be unusually high. The experience of the 1930s suggests that financial market conditions and monetary and credit measures can signal whether any attempt to reduce excess reserves is too abrupt. Further, the experience demonstrates that raising reserve requirements is surely *not* the best way to eliminate excess reserves. ■

<sup>1</sup> Banks and other depository institutions are required to hold reserves in the form of deposits at Federal Reserve Banks or vault cash equal to 10 percent of their transactions deposits over \$44.4 million (lesser amounts are subject to lower requirements).

<sup>2</sup> Before 1980, reserve requirements applied only to Federal Reserve member banks and varied according to a bank's location. In general, reserve requirements were higher for banks located in larger cities ("central reserve" and "reserve" cities) than those in smaller cities and towns ("country" banks).