

ASK AN ECONOMIST



Daniel L. Thornton has been an economist at the St. Louis Fed since 1981. A vice president, his areas of interest are monetary theory and policy, macroeconomics, and econometrics. For more on his work, see his web page at <http://research.stlouisfed.org/econ/thornton/index.html>

Q. How does the Federal Reserve control the supply of money?

A. The Fed controls the supply of money by increasing or decreasing the monetary base. The monetary base is related to the size of the Fed’s balance sheet; specifically, it is currency in circulation plus the deposit balances that depository institutions hold with the Federal Reserve. The Fed has essentially complete control over the size of the monetary base.

The primary way the Fed controls the monetary base is through open market operations: buying or selling securities. To increase the monetary base, the Fed buys securities from any party and pays with a check. That check, written on the Fed, is deposited by a bank in its account with the Fed, thereby adding to its reserves and increasing the monetary

base. The same process works for decreasing the monetary base: The Fed sells securities, getting a check from a bank in exchange. When the check is deposited, the bank’s balance at the Fed decreases.

The total supply of money (M1) consists of currency held by the public and checkable deposit balances of banks and other depository institutions. The money supply and the monetary base are linked by reserves, i.e., vault cash and deposit balances held at Federal Reserve banks. While the Fed’s control over the size of the monetary base is complete, its control over the money supply is not. One major reason for this is banks can choose to hold the additional base money (i.e., deposit balances with the Federal Reserve banks) supplied by the Fed as excess reserves.

LETTERS TO THE EDITOR

These letters are in response to “Why Are Corporations Holding So Much Cash?” The article appeared in the January 2013 issue of *The Regional Economist*. See stlouisfed.org/publications/re/pastissues/?issue=2013/1

Dear Editor:

Wouldn’t the quick ratio give you a closer look at the question? You might be mixing an increase in working capital with a desire to hold cash. Has this been looked at? So, what we want to find is the excess over the normal or even trend quick ratio.

Lee Minton, investment manager in Sparta, N.J.

Dear Editor:

Investment analysts have been using the amount of cash on corporate balance sheets as a measure of financial strength. The article seems to support this thinking by use of the chart relating cash to assets. From the standpoint of financial strength, however, it would seem appropriate to also analyze cash to debt.

Richard Hodde, retired partner of WEDGE Capital Management in Charlotte, N.C.

Response from Co-Author Juan M. Sánchez to These

Two Letters:

Thanks for your questions; they are very relevant. The “quick ratio” is the ratio of what we refer to as cash in the article to the current liabilities. It measures the ability of a company to use its cash to retire its current liabilities immediately. In the article, our concern was why corporations hold so much cash, but we focused on a measure referred to as cash-to-net-assets ratio, which is obtained by dividing aggregate cash and equivalent assets by aggregate total assets minus cash and equivalent assets.

I totally agree that what we are interested in in the article is abnormal

cash holdings. We actually mentioned that the work of Pinkowitz, Stulz and Williamson considered a measure of “abnormal cash holdings,” defined as the difference between the cash holdings of firms predicted using their patterns in the late 1990s and their actual cash holdings in subsequent periods. They showed that abnormal cash holdings of U.S. firms are significantly larger than those of foreign firms.

Dear Editor:

The article by Sánchez and Yurdagul attributes the vast cash holdings of corporations to uncertainty and precaution, credit constraints, and tax avoidance. This fails to speak of another possibility—inadequate aggregate market demand stemming from four leakages, one being the massive increase in income inequality: the larger fraction of income going to a small fraction at the top, with individual incomes so high they could not be expected to spend more than a fraction on anything that provided jobs. This weakness in aggregate demand left corporations with few promising new investment opportunities; so, they sat on cash or bought up other companies, the second even increasing unemployment.

James Morgan of Ann Arbor, retired economics professor at the University of Michigan

Dear Editor:

I’ve always thought a good study would look at the margin requirement for derivative transactions for currency and interest rate instruments. Multinationals use these more and more to smooth earnings and risk in overall operations. The requirement forces cash to be held to secure such transactions, and just a quick perusal of Microsoft’s 10K reveals as much. The growth of derivatives over the study period should help explain at least some of the cash accumulation.

Raymond Lombardo, managing partner/CEO of investment advisers Clearview Investment Partners LLC in Newport Beach, Calif.

We welcome letters to the editor, as well as questions for “Ask an Economist.” You can submit them online at www.stlouisfed.org/re/letter or mail them to Subhayu Bandyopadhyay, editor, *The Regional Economist*, Federal Reserve Bank of St. Louis, Box 442, St. Louis, MO 63166. To read other letters to the editor, see www.stlouisfed.org/publications/re/letters/index.cfm