

## DEPARTMENT OF THE TREASURY WASHINGTON

March 10, 1993

Mr. Gregory K. Soderberg 2410 4th Drive, SW Austin, MN 55912

Dear Mr. Soderberg:

This is in response to your letter of March 1 in which you asked a number of questions about money.

I believe that the following information responds to your questions:

The Board of Governors of the Federal Reserve System has the responsibility for determining United States monetary policy. With the assistance of the twelve Federal Reserve Banks, the Board manages the Nation's money supply. Since our economy has grown between 1913 when the Federal Reserve System was founded and the present, this ordinarily means that the Board determines the rate of increase in the money supply.

When the economy grows there are more economic transactions, and more money is needed to pay for them. If the Board were to decrease the money supply during a period of economic growth, it could stop the growth. Of course, if the Board increases the money supply too rapidly, it can cause inflation.

If the money supply is to be increased, money must be created. The Federal Reserve Board (or "the Fed" as it is often called) has several ways of allowing money to be created, but the actual creation of money always involves the extension of credit by private commercial banks.

Modern banking is often explained by analogy with the practices of goldsmiths in early seventeenth century England. These goldsmiths held their customers' gold in safekeeping and issued notes to the customers instead, promising to deliver the gold on demand. The goldsmiths discovered that the customers would not all want the gold back at the same time, so it was safe to loan the gold to someone else in the meantime. When the goldsmith loaned the gold out, he had created money. Obviously, the amount of gold had not increased, but the note promising to pay gold circulated as money and so did the gold it was based on -- before the goldsmith intervened only the gold circulated as money. It was an easy step to making the loan in the form of a note promising to pay gold, and keeping the gold safely in vaults at all times. Then only the notes circulated as money. Nothing limited the number of notes the goldsmith could issue except the fact that he did have to pay gold if anyone presented them to him. If he issued too many people would not believe that he

would be able to pay, and would refuse to accept them. To avoid this problem, prudent goldsmiths -- and, later, prudent bankers - always kept a certain amount of gold on hand as a reserve.

Modern banks operate in a similar way, with several important differences. One is that they are required by law to keep reserves equal to a percentage of their deposits. The Fed has the power to change this "reserve requirement" but, generally, the ratio of deposits to reserves is kept at about six to one. This means that the private, commercial banks cannot create all the money they might like to create. They are limited by the amount of reserves which they possess. Another difference is that the reserves now consist of cash (coins and paper money) and of deposits with the twelve Federal Reserve Banks, instead of gold. (The twelve Federal Reserve Banks are called "bankers' banks," because the member banks, the United States Government, and foreign governments keep deposits there.)

In both the goldsmiths' practice and in modern banking, new money is created by offering loans to customers. A private commercial bank which has just received extra reserves from the Fed (by borrowing reserves for example) can make roughly six dollars in loans for every one dollar in reserves it obtains from the Fed. How does it get six dollars from one dollar? It simply makes book entries for its loan customers saying "you have a deposit of six dollars with us." Why does this work - how can the bank pay out money to all the borrowers? The answer is that in practice the borrowers don't all withdraw their money at the same time, any more than the goldsmiths' customers did in the seventeenth century, especially since the Federal Deposit Insurance Corporation insures that the customers can leave their money in the bank without worrying about losing it. (Actually, the borrowers might take their deposits to other banks, but the result -- the creation of money -- is exactly the same if one then looks at all banks taken together rather than at the bank which made the initial loan.)

The advantage of creating money by extending loans is that the new money goes to people that the bank believes will be able to pay it back. In general, this means that the money will go to people who are engaged in productive economic activity. Ideally, the new money will serve to channel real resources into productive use and, ideally, the new money will be created by banks only when there is loan demand in the first place, that is, only when more economic activity is taking place and more money is needed to finance it. You may want to know whether the bank is the one getting the benefit of the new money, since the bank owns the new money while the customer has merely borrowed the money. The bank does indeed get the benefit of the new money. However, if the bank loses reserves for any reason (say, by paying back to the Federal Reserve Banks the reserves which it has borrowed) then it must call in its loans and stop making new ones until it



## DEPARTMENT OF THE TREASURY WASHINGTON, D.C. 20220

May 10, 1996

Mr. J. Drew Foster c/o 41 Manners Road Ringoes, New Jersey

Dear Mr. Foster:

I have received your letter of April 28, 1996, in which you ask a question related to your earlier correspondence with this office. Once again, I hope that I will be able to address your concerns.

It is important to remember that the value of all assets in the economy vastly exceeds the value of the money supply. The value of the money supply, however, exceeds the value of the economic transactions that are occurring at any given time. These economic transactions include the purchase of goods and services, as well as the repayment of loans and the payment of interest. Thus, the money that one borrower uses to pay interest on a loan has been created somewhere else in the economy by another loan.

I hope that this explanation is responsive to your concerns.

Sincerely yours,

John M. Yetter Attorney-Advisor