Bank Lending and Monetary Policy: A Comment

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Bank Lending and Monetary Policy: A Comment

by Allan H. Meltzer
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With commendable timing, academic economists rediscovered bank lending just before the start of the 1990-91 recession. Bernanke (1983) claimed that the shifts in loan supply made a major contribution to the Great Depression of the early 1930s. Bernanke and Blinder (1988) developed a small model interrelating loans, deposits, and output. I refer to this work and the many papers that followed as "the lending view."

The lending view became an active research area just before the Federal Reserve and the Bush administration argued publicly that reduced willingness of banks to lend contributed to the 1990-91 recession and the slow recovery. One metaphor of the time was that a 50 mile an hour headwind was blowing against the expansion. The (intended) presumption was that the Federal Reserve was doing its prudent utmost to foster expansion but was stymied by the refusal of banks to lend aggressively. I argued at the time that this view was wrong, Meltzer (1991).

The lending view consists of two principal propositions. First, spending by some group of borrowers depends on bank loans. Second, monetary policy shifts the supply of bank loans relative to other types of credit.

The first proposition is not in doubt if "depends" means only that bank loans are a main source of external finance for many small and medium-sized firms. There are alternative lenders for these firms, however, including finance companies, trade credit, credit card debt, venture capitalists, families and others. At issue is how much substitution among types of credit occur. This issue is usually neglected, and the current paper is not an exception. Studies of bank lending and borrowing cannot by themselves establish that borrowers could not or did not obtain credit or that they were
forced to contract.

The second proposition is more doubtful. The principal problem for the lending view is to show that autonomous shifts in banks' offers to lend contribute significantly to cyclical changes in total lending and output. The alternative view is that banks lending responds to demand. Critics of the lending view point out that banks can borrow Euro-dollars, issue certificates of deposits, sell securities and, in other ways, finance lending if it is profitable. And, if the banks face an excess demand for loans, why do other intermediaries fail to satisfy the excess demand?

The paper by Walsh and Wilcox is a serious effort to analyze part of the second proposition. The authors try to separate shocks to supply and demand using the prime rate to measure supply effects and the real value of loans to measure customers' demand. The general idea is to treat borrowers as price takers and banks as price setters. Banks set the prime rate and allow borrowers to decide how much to borrow. Borrowing and lending decisions are part of a five equation monthly model interrelating the real amount of bank lending, and the prime lending rate with measures of output, inflation, and monetary policy. The monthly output measure appears to be an improvement on previous work.

The authors deserve credit for making a serious effort to show that the demand and supply shocks they estimate are not spurious; they obtain similar measures using alternative procedures. They can be faulted for treating all loans as homogeneous and made at the prime rate. This is not entirely consistent with the lending view. On that view, small borrowers are subject to non-price rationing.

Walsh and Wilcox summarize their findings as showing: (1) supply shocks have had "important" effects on bank lending (p. 5); (2) the principal supply shocks in the recent past were changes in banks capital ratios, required reserves, and deposit insurance fees (p. 23);¹ and (although the conclusion blurs this finding) (3) output was on average less affected by loan supply shocks in the recent cycle than in past

¹Only the last two are statistically significant. They also report effects of the 1980 credit controls. I omit the 1980 credit controls as raising separate issues. It is notable that the Basle capital requirements do not have a significant effect.
allows bank reserves to adjust. Hence at any preset Federal funds rate, banks can obtain (or reduce) reserves and expand or contract bank loans if there is a positive (negative) return to lending. In other words, the Federal funds rate alone does not tell us whether bank reserves are rising or falling. An essential part of the monetary mechanism is missing. The missing pieces are important when the economy changes direction or speed particularly if the Federal Reserve is slow to change the funds rate. Some measure of aggregate reserves or base money should be part of the model to test for an independent or non-monetary lending channel.

A peculiar feature of the work on the lending view that I have seen is that non-bank financial assets are nowhere to be found. Banks hold both loans and securities, such as Treasury bills and government bonds. Omitting government securities is a second misspecification.

To show why, let me describe where the misspecification enters. Suppose there has been a shock to bank lending such as is discussed in the paper and in the lending view generally. Banks in the aggregate now lend less per dollar of reserves than in the past. Since they lend less, these are two possible outcomes, given the supply of reserves or base money and the stock of government securities. Banks either hold excess reserves or they buy more securities. Since bank reserves have zero interest return, banks minimize excess reserves. Hence, a decision to reduce loans is a decision to buy more securities. Banks bid for securities in an open market, so their decisions change the yield on securities relative to other yields. Other intermediaries such as thrift institutions, mortgage lenders, finance companies, etc., faced with the resulting change in relative yields, acquire an alternative asset. They supply the loans, mortgages, or leases that the banks forego. The net effect is a change in the banks’ supply of loans without a corresponding change in total credit extended. The only alternative is that banks hold idle excess reserves. There is no evidence that this occurred in the 1990s. If it had occurred, the solution would have been simple. The Federal Reserve could have supplied more base money by lowering the funds rate, as they soon did.

Let me summarize this section. Bank lending is not informative about whether
or not output would have expanded more in 1991-92. The authors are right to separate loan demand and supply, but their analysis cannot answer the question: did restrictions on bank lending reduce output in 1991-92? There is no evidence in the movement of excess reserves showing that banks refused to lend or reduce lending. Even if they did the banks' actions tell us nothing about the total supply of credit offered to business and households.

Two main reasons that bank lending fell during the early 1990s were that the economy was in recession and bank reserves rose very slowly. Bank reserves are the raw material for aggregate bank loans and money. In the two years ending fourth quarter 1990, total bank reserves rose at a 0.6% annual rate; total reserves increased by less than $1 billion during the two years as a whole. In the next two years, total reserves rose at an 11.7% compound annual rate, and the addition to reserves was $18.6 billion. The funds rate was reduced from 8% in the fall of 1990 to 4-1/4% in the fall of 1991. Talk about a credit crunch and 50 mile an hour headwinds ended. In my view, the lending problem was in part a monetary problem and, in part, a problem of anticipations set off by lower inflation and falling asset prices in many markets -- especially real estate markets. Whether judged by interest rates or reserve growth, monetary policy was very restrictive (as the Shadow Open Market Committee argued at the time.)

Before leaving this part of my discussion, let me narrow some of the differences with Walsh and Wilcox. My claim is that the effect of bank lending on output, given the growth of money and government debt is close to zero, so I set it at zero. The authors find that 6 to 18 months after a lending shock, bank lending explains about 2% of the unexplained variance of output.

We can further narrow the differences. Walsh and Wilcox use monthly data from 1959 through 1994. From the mid-1960s to the end of the 1970s, regulation Q ceilings were binding at times. Until 1970, the ceiling rates applied to all CDs, even the largest. The ceilings worked to reverse the relation between growth of money and bank credit (loans and securities). When the ceiling was binding, wealthowners reduced time deposits and bought securities directly. Bank credit, including loans,
declined relative to money, currency and demand deposits. Some of these effects are hidden in the Walsh-Wilcox estimates because they do not isolate the effects of regulation Q and the credit crunches it fostered. I believe that if they separated the effects of regulation Q, their estimate would be less biased, smaller, and closer to mine at zero.

A main piece of evidence in favor of the lending view comes from the Great Depression. Bank failures, corporate failures and increased risk make a plausible case for the lending view in this period. If declines in bank lending have an independent effect, the Great Depression is the period when that effect should be most obvious.

Remember, that, according to the lending view, the effect occurs because small firms are much more dependent on banks. Small firms are forced to curtail activity because they cannot borrow.

Plausible as this story seems, it is not supported by the data. During the depression, open market borrowing in the form of commercial paper and bankers acceptances declined relative to commercial bank loans (in 101 cities). Chart 1 shows the ratio of open market borrowing to bank loans.

Then as now, larger, more secure firms were the main borrowers on the open market. The fall in open market borrowing relative to bank borrowing is counter to the lending view.

None of this denies that intermediation is important. My conclusion is that restrictive Federal Reserve policy explains the decline in both money and bank lending during the Great Depression and in the most recent recession. Credit crunches had an independent effect on lending under regulation Q rules, but this is well-known and not part of the lending view.

Postscript

Shortly after completing this comment, I received two new studies of bank lending and the lending view. Morris and Sellon (1995, p. 73) write:
"[C]oncern that structural changes in the banking system may affect the transmission mechanism does not appear to be warranted." Sharpe (1995, pp. 32-33) concludes that there is little evidence supporting claims that the decline in lending in 1990-91 was the result of capital standards. These studies add to the growing skepticism about the main tenets of the lending view.
Ratio of Open Market Credit to Bank Loans

August 1929-February 1933

Chart 1
References


