The Fed's First (and Lasting) Job: Lender of Last Resorts

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The Federal Reserve was designed to be a lender of last resort. The year was 1913, and the concept of monetary policy had not yet been invented. But memories of the panic of 1907 were very fresh, and the authors of the Federal Reserve Act were clear that the Fed was intended to be a lender to banks.

The founders of the Fed considered a key defect of the US financial system to be the lack of an elastic currency; that is, a currency that was flexible and could adjust to meet both the ordinary demands of economic activity and the extraordinary demands associated with liquidity shocks. The Federal Reserve Act was designed to create an asset-backed currency and supply of reserves that would adjust automatically and flexibly to changes in the needs of trade. The primary mechanism by which the Fed would regulate currency and credit was the discount window.

In some respects, the Fed performed admirably in its early days. It virtually did away with the problems of the seasonal economy as the founders believed that a financial crisis was more likely to occur in times of seasonal tightness in the money and financial markets. The Federal Reserve's discount mechanism proved successful in accommodating those seasonal fluctuations in currency and credit demand.

Lessons from the Great Depression

There were no banking panics or serious financial crises during the first 15 years or so of the Fed's life. Then, in the 1930s, came the Great Depression. The literature on the Fed's failure to avert—and its inability to respond effectively to — the Great Depression is voluminous. An abbreviated summary includes:

- Milton Friedman and Anna Schwartz maintained that Fed policy went from "enlightened" to no light and allowed the money supply to fall by a third between 1929 and 1933.
- Barry Eichengreen and others focused on the role of the gold standard in transmitting the Great Depression in the United States and abroad.
- Allan Meltzer and others noted the Fed's failure to understand the difference between nominal and real interest rates and its reliance on misleading measures of bank reserves.
- Michael Bordo and others argued that there was a flaw in the Federal Reserve Act, which was made to fit the uniquely bifurcated regional structure of the US banking system. That system had strict limits on branch banking and, as many studies have shown, contributed to making the US banking system more vulnerable to shocks.

In response to the Great Depression, the Fed's lending powers were greatly expanded. Collateral restrictions were loosened. In 1932, the famous section 13.3 was added to the Federal Reserve Act to allow the Fed to lend directly to nonbank, private-sector entities in unusual and exigent circumstances. (Eventually, the Monetary Control Act of 1980 and the Federal Deposit Insurance Corporation Improvement Act of 1991 further loosened collateral requirements on the Fed's lending under section 13.3.) The Fed was given new powers to adjust reserve requirements and set margin requirements. Interest rate ceilings were also introduced.

Recently, many have maintained that the Fed's aggressive response to the financial crisis of 2007–08 threatens its ability to conduct an independent monetary policy. The Fed had the opposite problem in the 1930s. Its failure to respond adequately to the Great Depression caused an erosion of the Fed's independence and led to a centralization of power in the Board of Governors in the Banking Acts of 1933 and, especially, of 1935.

Several other significant changes to the banking and financial system came out of the Great Depression: the introduction of deposit insurance, the Glass–Steagall Act (separating investment and commercial banking), and the Securities and Exchange Commission. All the financial system's rules were changed; over the next 60 years, a new environment for the banking system was established.

Five formative episodes since World War II

In the postwar years, the Federal Reserve has been considerably more responsive to perceived threats to financial stability. Five episodes in particular helped establish some precedent for the Fed's response to the recent crisis. All five of these episodes were much milder than the financial crisis of 2007–08, and the Fed's response was less dramatic.

The Penn Central bankruptcy

In 1970, the Penn Central Company got into financial trouble after issuing a large amount of commercial paper, and went into bankruptcy. Its bankruptcy triggered a crisis in the nonfinancial commercial-paper market as this event raised questions about whether some other firms issuing commercial paper might also be insolvent. In response, the Federal Reserve encouraged banks to revive funding to these firms. The Fed removed interest rate ceilings on large certificates of deposit, which enhanced the banks' ability to raise funds to make these loans. The Fed also encouraged banks to borrow from the discount window until they could raise new funds.

The result: success. A drop in the commercial-paper market was offset fairly quickly by a rise in commercial and industrial lending by banks.

The failure of Franklin National Bank

In the early 1970s, Franklin National got into financial difficulties, and its solvency was very much in doubt. There was a concern that its failure would trigger problems in the markets where it was most active—wholesale funding and foreign exchange. This was especially the case in the foreign exchange market, because Franklin's troubles coincided with the failure of Herstatt Bank in Germany. US regulators were keenly aware of disruptions in foreign exchange markets that failure had caused and Franklin's foreign exchange operations were larger than Herstatt Bank's.

In response, the Federal Reserve provided a considerable amount of discount window lending to replace the wholesale funding that Franklin National could no longer obtain. It assumed Franklin's foreign exchange book, stepping in between Franklin and its counterparties, and successfully wound it down. Efforts to resolve Franklin's situation were coordinated with other agencies. There was some tension in these markets but no full-scale collapse. Eventually, Franklin National was sold.

The Continental Illinois rescue

A large commercial industrial loan provider—in fact, the eighth-largest retail bank in the United States in the early 1980s—Continental Illinois National Bank financed a lot of its operations in the wholesale funding market. There was concern that Continental's failure would result in a loss of access to wholesale funding by many other large banks. The Federal Reserve provided discount window loans and committed itself to providing backstop funding for the bank. The Federal Deposit Insurance Corporation guaranteed all liabilities and eventually recapitalized the bank. There was tension in wholesale funding markets because of Continental's travails, but these markets recovered as the recapitalization plan was implemented.

The 1987 stock market crash

Equity market values plunged and triggered substantial margin calls on future exchanges, which greatly increased borrowing needs. The Chicago derivatives markets closed for a while; equity markets nearly did the same.

The central bank's response was swift. The day after the crash, the Fed announced it would serve as a liquidity backstop, which boosted confidence in the markets. It reduced the target federal funds rate and injected reserves through open market operations. Moreover, the Fed purposely operated in a very high-profile manner in successive days to promote investor confidence. During this episode, Fed officials engaged in a lot of jawboning to convince commercial banks to provide credit to one another and to facilitate settling payments. To be sure, many individuals and institutions worked to smooth things out after the crash — many firms stepped in to buy their own stock, which helped buoy the market — but the Fed's response was clearly supportive in restoring functioning in the equity markets.

The Long Term Capital Management rescue

A large, highly levered hedge fund, Long Term Capital (LTC) was on the wrong side of several trades in the wake of the Russian default. There were serious concerns about the direct exposure of other financial firms to LTC. There was also some concern that these institutions had trades that were the same as those held by LTC and that those firms would suffer if it were unwound in a disorderly fashion. Financial markets were already under strain from the Russian default and the continued turmoil from the East Asian crisis the preceding year; in response, the Federal Reserve provided its good offices to help coordinate a resolution and a recapitalization of LTC.

Lessons

The way the Fed responded to these previous episodes foreshadowed its recent response. For instance, the Fed had shown that it cares about severe disruptions in short-term lending markets, such as commercial paper, because instability in those markets could have economic implications. We observed this in the case of Penn Central, where the Fed was able to channel support through the commercial banking sector; in the most recent episode, support was more direct.

The Federal Reserve also established that extraordinary support to financial institutions was part of its toolkit, as it demonstrated in the Franklin National and Continental Illinois episodes. However, assistance to individual institutions was given to prevent deterioration in the functioning of broader markets. For example, Franklin National was assisted to prevent disruptions to the foreign exchange market.

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When it comes to acting as lender of last resort, the Fed has used both direct and indirect lending. Why? The first lesson from these episodes is that counterparties matter. Open market operations are conducted with a small set of institutions. Providing liquidity through open market operations that will spread to the rest of the financial system requires that markets are functioning, especially funding markets and short-term markets, which are the least likely to be functioning during a crisis.

Second, an effective crisis response involves converting illiquid into liquid assets and increasing the supply of risk-free assets. The discount window in particular allows this conversion, but the Fed has also lent out securities from the System's open market account. Even if the Federal Reserve insulates itself from credit risk associated with a particular institution, these actions expand the supply of liquid securities.

The third and final lesson is the importance of the regulatory environment. It's been noted that the regulatory regime in the United States during the late 1880s through the early 1900s, which consisted of smaller unit banks, was particularly crisis-prone, especially when compared to Canada. After the Depression, the US financial system was constrained by Glass–Steagall, interest rate ceilings, and other regulations. Efforts to circumvent these rules contributed to an expansion of the shadow banking system. It is even more challenging for a central bank to operate alongside a large shadow banking system which, unlike depository institutions, does not interact with the Fed directly.

Joseph Haubrich, vice president and economist at the Cleveland Fed, comments on "The Fed's First (and Lasting) Job: Lender of Last Resort."

According to the Oxford English Dictionary, the phrase "lender of last resort" first appeared in print in R.G. Hawtrey's *Art of Central Banking* (1932). In other words, people weren't talking about a lender of last resort when the Federal Reserve was created; that started only with the onset of the Great Depression. Over the years, the phrase's usage has ebbed and flowed, but it has never been a chart-topper. Still, when you read history, it's good to keep in mind that an evolution of ideas is going on as well. There is the history, the development of a concept, and a way to describe what's actually going on.

Wheelock and Carlson pose some interesting questions: Is the lender of last resort purely about the money supply? Can you inject liquidity pretty much any way you want and, if the quantity is high enough, can it defuse the crisis? On the other hand, when the financial markets aren't working, you've got to be much more targeted and offer discount window lending to individual firms, a primary-dealer credit facility, or something along those lines. I would call this a discussion of the relative merits of open market operations and discount window lending, though that's not quite right. But this is an essential theme to bring out, whether you agree with the authors' conclusion or not.

One broader issue that the paper brings out nicely is the distinction between a run on a single bank and a systemic banking panic. What a lender of last resort should be doing depends vitally on the circumstances.

We don't have a fully articulated theory of banking crises and how the lender of last resort should respond to them, but there are various concepts: Is the contagion like a fire or a flu that may spread to your house? Or is it more akin to finding out on TV that someone has gotten Mad Cow Disease: You won't catch it from them, but you're never going to eat a hamburger again.

Did you want to stop a financial panic because the entire system would be liquidated otherwise? Or were you merely bailing out a bank that had a lot of political influence? In the 1800s, you knew what was happening because you saw out-and-out panic and runs on the banks; in the quiet period through the middle of the twentieth century, it was harder to tell. But I think it is important to establish that the lender-of-last-resort reaction depends on what form the crisis takes.

If you're going to judge what the Fed did, you probably should have a standard of comparison. I would like to see some notion of what the alternatives to lenders of last resorts are. In American history, both the US Treasury and private clearinghouse associations have acted as lenders in panics. What are the advantages and differences? Another comparison is not with history, but with theory. Granted, we don't have a fully articulated theory of banking crises and how the lender of last resort should respond to them, but there are various concepts: Is the contagion like a fire or a flu that may spread to your house? Or is it more akin to finding out on TV that someone has gotten Mad Cow Disease: You won't catch it from them, but you're never going to eat a hamburger again.

A final observation—the central bank is embedded in a broader legal and financial system. The bank can do only what Congress has authorized. And what works depends critically on the financial system. Both of these conditions have changed often and significantly in recent decades. ■