

## Should the Fed Do Emergency Lending?

By Renee Haltom and Jeffrey M. Lacker

In its 100-year history, many of the Federal Reserve's actions in the name of financial stability have come through emergency lending once financial crises are underway. It is not obvious that the Fed should be involved in emergency lending, however, since expectations of such lending can increase the likelihood of crises. Arguments in favor of this role often misread history. Instead, history and experience suggest that the Fed's balance sheet activities should be restricted to the conduct of monetary policy.

The Federal Reserve's emergency lending to the financial system was a prominent feature during the 2007–08 financial crisis. In fact, many of the Fed's actions in the name of financial stability in the course of its 100-year history have come not from its role as a supervisor of financial firms, but in the form of credit extension to institutions and markets once crises are underway.

Is the Fed's role in emergency lending justified? A few specific facts are commonly cited in favor of such a role: the fact that the Fed was created in response to recurrent bank panics; the foundational work of 19th century economist Walter Bagehot, who urged the Bank of England to lend liberally during panics; the Great Depression, in which one-third of the nation's banks failed; and theoretical models that suggest banking is inherently prone to "runs" that can be resolved with emergency liquidity that the central bank is well-positioned to provide.

This *Economic Brief* argues that these facts do not justify the central bank's role in emergency lending.<sup>1</sup> To interpret them as justification misreads history and experience. Given the costs of emergency lending—in terms of increasingly prevalent moral hazard and risk-taking in the

financial system and the likelihood of political entanglements that compromise the Fed's monetary policy independence—there is a strong argument for scaling back the Fed's authority to conduct emergency lending. That would limit the Fed's balance sheet activities to its primary function of providing monetary stability to the economy and financial system.

The following sections address arguments commonly made in favor of crisis lending.

### **"The Fed was created to respond to panics"**

Before the Fed was created in 1913, bank runs plagued the U.S. financial system. Runs often started with the fear that an institution was on the brink of suspending payments, spurring many of its depositors to withdraw their funds in advance. Even mere rumors of impending suspension could spark a run or broader "bank panics" involving many institutions. Prior to the Fed, major panics tended to occur at least once per decade, with many smaller panics in between. The disastrous Panic of 1907 finally galvanized the political will to create the Fed.

Panics were the result of two overlapping problems. First, the currency supply was inelastic.

Currency was issued by banks but was required by the National Banking Acts of 1863 and 1864 to be backed by U.S. government bonds. The cumbersome process of acquiring bonds and posting them as collateral meant the supply of currency could not always expand quickly enough when depositors demanded it on a large scale, producing withdrawal suspensions and encouraging runs.

Second, the banking system was fragmented. Most states prohibited banks from branching, and there were more than 27,000 individual banks when the Fed was founded. Many were dependent on the health of the local economy and therefore quite vulnerable to regional and seasonal shocks that spurred withdrawal requests. Country banks would request currency shipments from city banks, which sometimes ran short and denied the request. The result was large seasonal increases in interest rates and gold inflows from abroad. Currency shortages made banks especially vulnerable to suspension fears during the autumn harvest, which is why panics were more likely to occur in the fall.

Since reforms to counteract the banking system's fragmentation, such as eliminating branching restrictions, were viewed as politically infeasible, Congress created the Fed to "furnish an elastic currency." This meant that the Fed would offer loans to commercial banks collateralized by their own assets. Only "real bills"—short-term paper arising from commercial transactions or international trade—were eligible to back this new currency, a requirement intended to ensure that the currency supply was naturally limited by the legitimate needs of commerce, as opposed to the appetite for speculation.<sup>2</sup>

In other words, the Fed was created to achieve what can be best described as monetary stability. The Fed was designed to smoothly accommodate swings in currency demand, thereby dampening seasonal interest rate movements. The Fed's design also was intended to eliminate bank panics by assuring the public that solvent banks would be able to satisfy mass requests to convert one monetary instrument (deposits) into another (currency). Preventing bank panics would solve a monetary instability problem.

The Fed's original monetary function is distinct from credit allocation, which is when policymakers choose certain firms or markets to receive credit over others.<sup>3</sup> Monetary policy consists of the central bank's actions that expand or contract its monetary liabilities. By contrast, a central bank's actions constitute credit policy if they alter the composition of its portfolio—by lending, for example—without affecting the outstanding amount of monetary liabilities. To be sure, lending directly to a firm can accomplish both. But in the Fed's modern monetary policy procedures, the banking system reserves that result from Fed lending are automatically drained through offsetting open market operations to avoid driving the federal funds rate below target.<sup>4</sup> The lending is, thus, effectively "sterilized," and the Fed can be thought of as selling Treasury securities and lending the proceeds to the borrower, an action that is functionally equivalent to fiscal policy. This type of lending qualifies as credit allocation in the sense that the borrower obtains funds on terms that are presumably preferred to the terms available on the market.

Sterilized central bank lending is credit policy; unsterilized lending is a combination of monetary and credit policy. Expansion of the central bank's monetary liabilities through open market operations is pure monetary policy because markets are left to direct credit to worthy borrowers. Though open market operations are the primary means of conducting monetary policy today, it was done through direct lending to banks in 1914. Thus, the distinction between monetary and credit policy was blurred in the Fed's original design and in the language the founders often used.

Much of the Fed's 2007–08 crisis response was openly about allocating credit to specific sectors and institutions perceived as being in trouble, and most of the Fed's actions were sterilized.<sup>5</sup> A careful reading of history suggests that this form of crisis mitigation is not what the Fed's founders envisioned.<sup>6</sup> The original Federal Reserve Act excluded many financial institutions—including trusts, which were at the center of the Panic of 1907—from Fed credit. In addition, the Fed's founders generally opposed guarantee schemes, such as deposit insurance, for fear they

would encourage banks to take greater risks.<sup>7</sup> With the monetary instability problem perceived as solved by the Federal Reserve Act, the Fed's founders gave the Fed no special tools to aid insolvent firms to quell panics (emergency lending authorities exercised during the recent crisis were granted later), and the debate leading up to the Federal Reserve Act featured almost no discussion of whether that lack of lending authority would jeopardize the financial system.<sup>8</sup> If firms couldn't obtain credit under the Fed's strict collateralization rules—in a panic or otherwise—then they were considered to be simply unworthy of Federal Reserve credit.

In summary, the Fed was indeed founded to mitigate financial crises—but through expansion of the supply of currency, not through channeling funds to targeted institutions and markets as undertaken during the 2007–08 financial crisis.

### **“Bagehot advocated liberal lending”**

Walter Bagehot was a 19th century British economist whose famous book, *Lombard Street*, is often considered to be the playbook for central banks facing financial crisis. His work, along with that of earlier economist Henry Thornton, is generally considered to have established the case for central banks as “lender of last resort,” though neither author actually used the term in writing.

Bagehot's crisis dictum is often paraphrased as, “lend freely on good collateral at above-market interest rates.” Many people have argued that the Fed followed Bagehot's prescriptions during the recent crisis,<sup>9</sup> but this view misinterprets his work in several ways.

First, that simple dictum neglects several additional rules for crisis lending that Thornton and Bagehot provided: to allow firms that cannot post good collateral to fail and to mitigate not the failures of large firms, but rather any adverse effects of failures on the financial system by increasing the overall money stock. And importantly, Bagehot said the central bank should make its policies clear ahead of time to reassure the public that currency will be available and to prevent investors from expecting the central

bank safety net to protect them from bad investments.<sup>10</sup> By contrast, the Fed's lending during the recent crisis did not follow a pre-announced policy, provided financing to arguably failing firms, neglected to charge above-market rates in some cases, and took on credit risk.<sup>11</sup>

Second, Bagehot arguably viewed the “lender of last resort” role as a purely monetary function, as opposed to a credit function. He emphasized providing an adequate supply of paper notes in a crisis, albeit within the upper bound provided by the gold standard; how that expansion was accomplished was less important. As with the Fed in 1914, direct lending to banks was the standard method of expanding the central bank's monetary liabilities in Bagehot's time.<sup>12</sup> Once again, the Fed's 2007–08 crisis lending was largely nonmonetary in nature since the Fed sterilized many of its interventions.

Third, the Bank of England—the subject of Bagehot's writing—faced a different set of institutional considerations. Specifically, the Bank of England was accountable to stockholders, so the profit motive made it naturally reluctant to lend in riskier times. Bagehot's recommendation to lend freely was intended to encourage the Bank of England to lend. The Fed faces the opposite dilemma because it lends taxpayer dollars. The challenge to the Fed is how to resist the temptation—and perhaps political pressure—to lend too often.<sup>13</sup>

Thus, Bagehot's work provides scant support for common notions of crisis lending, such as that employed during the 2007–08 crisis.

### **“Insufficient lending caused the Great Depression”**

Advocates of central bank crisis lending often cite the Great Depression, when the Fed reacted passively, allowing one-third of the nation's banks to fail between 1930 and the banking holiday of 1933.

The Fed could have lent to prevent bank failures, but it did not. In part, this reluctance reflected the prevailing real bills doctrine and its focus on limiting speculation. This reluctance also reflected concerns about maintaining the gold standard.<sup>14</sup> The Fed tightened

monetary policy leading up to the Depression and allowed the money supply to contract by a third from 1929 to 1933, with a commensurate fall in the overall price level. Loan defaults rose as borrowers struggled to acquire the dollars they needed to repay debts.

As famously concluded by Milton Friedman and Anna Schwartz, bank failures were a less important factor in the Great Depression than the collapse of the money supply.<sup>15</sup> For example, Canada had zero bank runs or failures during the same period, but it also had a severe depression after its money supply declined by 13 percent.<sup>16</sup> To be sure, bank failures hastened withdrawals and reduced deposits, worsening the money supply decline. But the Fed could have offset that effect by increasing bank reserves through open market operations. Indeed, the contraction slowed when the Fed conducted open market operations in the spring of 1932, and the contraction resumed when the Fed reversed course later that year.<sup>17</sup>

The lesson from the Depression, then, is that central banks should prevent money supply collapses, not necessarily bank failures.

### **“The financial system is inherently unstable”**

A common argument given for emergency central bank lending is that the government must be equipped to provide backstop financial assistance to treat the inherent fragilities of banking.<sup>18</sup> Since banks engage in maturity transformation—borrowing short term to lend long term—they may be subject to “runs,” in which many investors quickly withdraw funding, leaving the bank unable to pay its longer-term creditors. Run prevention is one traditional argument for deposit insurance and emergency lending.

To complicate matters further, a large portion of maturity transformation today takes place outside the traditional banking sector in an interconnected web of banks and investment companies, including mutual funds, private equity pools, hedge funds, and others. Many observers have argued that the essence of the 2007–08 crisis was that many of these investors declined to roll over short-term, deposit-like investments, and that the process of pulling these investments resembled a bank run. As the shadow banking

system emerged over the past century, no official institution was established to create an “elastic currency” for it—that is, a reliable supply of short-term credit instruments to prevent runs and ensure the shadow banking system remained funded.<sup>19</sup>

This view of the need for emergency lending overlooks an important factor: financial institutions don’t have to fund themselves with short-term, demandable debt. If they choose to, they can include provisions to make contracts more resilient, reducing the incentive for runs. Many of these safeguards already exist: contracts often include limits on risk-taking, liquidity requirements, overcollateralization, and other mechanisms.<sup>20</sup> Moreover, contractual provisions can explicitly limit investors’ abilities to flee suddenly, for example, by requiring advance notice of withdrawals or allowing borrowers to restrict investor liquidations. Indeed, many financial entities outside the banking sector, such as hedge funds, avoided financial stress by adopting such measures prior to the crisis.

Yet, leading up to the crisis, many financial institutions chose funding structures that left them vulnerable to sudden mass withdrawals. Why? Arguably, precedents established by the government convinced market participants of an implicit government commitment to provide backstop liquidity. Since the 1970s, the government has rescued increasingly large financial institutions and markets in distress. This encourages large, interconnected financial firms to take greater risks, including the choice of more fragile and often more profitable funding structures. For example, larger financial firms relied to a greater extent on the short-term credit markets that ended up receiving government support during the crisis.<sup>21</sup> This is the well-known “too big to fail” problem.<sup>22</sup>

This incentive problem was visible during the crisis. When turbulence hit in August 2007, the Fed lowered the discount rate and urged banks not to think of borrowing as a sign of weakness. In December 2007, the Fed implemented the Term Auction Facility to make credit available on more favorable terms. These actions likely dampened the willingness of troubled institutions, such as Bear Stearns and Lehman Brothers, to undertake costly actions to shore up their

positions. These incentives were further entrenched when the New York Fed funded JPMorgan's purchase of Bear Stearns in March 2008.<sup>23</sup> When Lehman Brothers was allowed to fail in September 2008, despite being a much larger institution than Bear Stearns, expectations of support were recalibrated suddenly, spurring the most volatile days of the financial crisis. Allowing Lehman to fail could have been the start of a new, more credible policy against bailouts; but that same week, American International Group received assistance from the New York Fed, further confusing already volatile markets.

If the fragility observed in 2007–08 was due to inherent fragilities in banking, we should expect to see similar financial crises with some consistency across countries over time, but this is not the case. The 1920s and 1930s, for example, and the period since 1973 have seen significantly more frequent crises than the classical gold standard period or the Bretton Woods era. And many countries have experienced far fewer crises than the United States, which is more crisis-prone than most.<sup>24</sup> Canada provides a particularly striking example of a country that is quite similar to the United States but has avoided systemic banking panics altogether since 1839, and it had no central bank until the mid-1930s. Institutional features—specifically, bank branching and less-restrictive currency issuance—afforded its system an “elastic currency” with no official lender of last resort. Banks could lend reserves between them, and the system was concentrated enough that banks could monitor each other to offset the moral hazard that might otherwise arise from this private backstop.<sup>25</sup>

The lesson is that policy and perverse incentives, not inherent fragilities, are likely to have been the more important causes of financial turbulence in the United States, most recently in 2007–08.

### **Last Resort Lending: A Monetary Function**

History shows that the central bank's “lender of last resort” role was originally conceived as a strictly monetary function: providing an elastic supply of monetary assets when the demand for such assets expanded in times of financial distress. Experience suggests that the Fed's activities should be limited

to more closely align with this original vision. When the central bank utilizes “lender of last resort” powers to allocate credit to targeted firms and markets, it encourages excessive risk-taking and contributes to financial instability. It also embroils the central bank in distributional politics and jeopardizes the independence that is critical to the central bank's ability to ensure price stability. The lesson to be learned from the expansive use of the Fed's emergency-lending powers in recent decades is that it threatens both financial stability and the Fed's primary mission of ensuring monetary stability.<sup>26</sup> ■

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### **Endnotes**

<sup>1</sup> This *Economic Brief* is based on the essay, “Should the Fed Have a Financial Stability Mandate? Lessons From the Fed's First 100 Years,” by Renee Haltom and Jeffrey M. Lacker, published in the Federal Reserve Bank of Richmond *2013 Annual Report*.

<sup>2</sup> The Fed also was given authority to buy and sell certain securities through open market operations, but the primary purpose was to strengthen the Fed's ability to control gold flows.

<sup>3</sup> See Goodfriend, Marvin, and Robert G. King, “Financial Deregulation, Monetary Policy, and Central Banking,” Federal Reserve Bank of Richmond *Economic Review*, May/June 1988, pp. 3–22.

<sup>4</sup> Fed lending generally has been sterilized since the Treasury-Fed Accord of 1951, when the Fed adopted operating procedures that relied mainly on buying and selling U.S. Treasury securities on the open market to control its monetary liabilities.

<sup>5</sup> In an October 2009 speech, then-Chairman Ben Bernanke said, “Although the Federal Reserve's approach ... entails substantial increases in bank liquidity, it is motivated less by the desire to increase the liabilities of the Federal Reserve than by the need to address dysfunction in specific credit markets. ... For lack of a better term, I have called this approach ‘credit easing.’”

<sup>6</sup> The only form of credit allocation the founders emphasized was under the real bills doctrine, which allocated credit broadly toward “real” economic activity and away from speculation.

<sup>7</sup> See Flood, Mark D., “The Great Deposit Insurance Debate,” Federal Reserve Bank of St. Louis *Review*, July/August 1992, vol. 74 no. 4, pp. 51–77.

<sup>8</sup> Wicker, Elmus, *The Great Debate on Banking Reform: Nelson Aldrich and the Origins of the Fed*. Columbus, Ohio: Ohio State University Press, 2005.

<sup>9</sup> For example, see Madigan, Brian F., “Bagehot's Dictum in Practice: Formulating and Implementing Policies to Combat the Financial Crisis,” Speech at the Federal Reserve Bank of Kansas City Economic Policy Symposium at Jackson Hole, Wyo., August 21, 2009.

- <sup>10</sup> For more discussion on what Thornton and Bagehot intended, see Humphrey, Thomas M., “Lender of Last Resort: What It Is, Whence It Came, and Why the Fed Isn’t It,” *Cato Journal*, Spring/Summer 2010, vol. 30, no. 2, pp. 333–364.
- <sup>11</sup> For details, see Humphrey (2010); Madigan (2009); and Government Accountability Office (GAO), “Government Support for Bank Holding Companies: Statutory Changes to Limit Future Support Are Not Yet Fully Implemented,” GAO-14-18, November 2013.
- <sup>12</sup> Moreover, the Bank of England’s discount lending was intermediated through “discount houses,” which effectively prevented the Bank from knowing the identities of the borrowing institutions, much less allocating credit to them based on case-by-case assessments of their financial conditions and interconnections with the financial system.
- <sup>13</sup> This point is argued by Marvin Goodfriend in “The Elusive Promise of Independent Central Banking,” *Monetary and Economic Studies*, November 2012, vol. 30, pp. 39–54.
- <sup>14</sup> See Richardson, Gary, and William Troost, “Monetary Intervention Mitigated Banking Panics during the Great Depression: Quasi-Experimental Evidence from a Federal Reserve District Border, 1929–1933.” *Journal of Political Economy*, 2009, vol. 117, no. 6, pp. 1031–1073; and Eichengreen, Barry, *Golden Fetters: The Gold Standard and the Great Depression, 1919–1939*, New York: Oxford University Press, 1992.
- <sup>15</sup> They concluded: “If [failures] had occurred to precisely the same extent without producing a drastic decline in the stock of money, they would have been notable but not crucial. If they had not occurred, but a correspondingly sharp decline had been produced in the stock of money by some other means, the contraction would have been at least equally severe and probably even more so.” See Friedman, Milton, and Anna Jacobson Schwartz, *A Monetary History of the United States: 1867–1960*, Princeton, N.J.: Princeton University Press, 1963.
- <sup>16</sup> Friedman and Schwartz (1963, p. 352)
- <sup>17</sup> See essays about the Great Depression era at [www.federalreservehistory.org](http://www.federalreservehistory.org).
- <sup>18</sup> For example, Dudley, William C., “Why Financial Stability Is a Necessary Prerequisite for an Effective Monetary Policy,” Remarks at the Andrew Crockett Memorial Lecture, Bank for International Settlements 2013 Annual General Meeting, Basel, Switzerland, June 23, 2013.
- <sup>19</sup> See Gorton, Gary, and Andrew Metrick, “The Federal Reserve and Panic Prevention: The Roles of Financial Regulation and Lender of Last Resort,” *Journal of Economic Perspectives*, Fall 2013, vol. 27, no. 4, pp. 45–64.
- <sup>20</sup> See Bernanke, Ben S., “Some Reflections on the Crisis and the Policy Response,” Speech at the Russell Sage Foundation and the Century Foundation Conference on “Rethinking Finance,” New York, April 13, 2012.
- <sup>21</sup> GAO (2013)
- <sup>22</sup> For a more complete discussion, see Haltom and Lacker (2014), and Federal Reserve Bank of Richmond Our Perspective Series, “Too Big to Fail,” on the Bank’s website.
- <sup>23</sup> For example, credit rating agencies considered the government’s support of Bear Stearns in their decisions to leave Lehman Brothers with high ratings just before its collapse. In a September 2009 House subcommittee hearing, Moody’s Chairman and CEO Raymond McDaniel said, “An important part of our analysis was based on a review of governmental support that had been applied to Bear Stearns earlier in the year. Frankly, an important part of our analysis was that a line had been drawn under the number five firm in the market, and number four would likely be supported as well.”
- <sup>24</sup> See Bordo, Michael D., and Barry Eichengreen, “Crises Now and Then: What Lessons from the Last Era of Financial Globalization,” In *Monetary History, Exchange Rates and Financial Markets: Essays in Honour of Charles Goodhart*, Volume 2, edited by Paul Mizen, pp. 52–91, London: Edward Elgar Publisher, 2003; Reinhart, Carmen M., and Kenneth S. Rogoff, *This Time is Different: Eight Centuries of Financial Folly*, Princeton, N.J.: Princeton University Press, 2009; Calomiris, Charles W., and Stephen H. Haber, *Fragile By Design: The Political Origins of Banking Crises and Scarce Credit*, Princeton, N.J.: Princeton University Press, 2014.
- <sup>25</sup> See Bordo, Michael D., Angela Redish, and Hugh Rockoff, “A Comparison of the Stability and Efficiency of the Canadian and American Banking Systems, 1870–1925.” *Financial History Review*, April 1996, vol. 3, no. 1, pp. 49–68.; Williamson, Stephen D., “Restrictions on Financial Intermediaries and Implications for Aggregate Fluctuations: Canada and the United States 1870–1913,” In *NBER Macroeconomics Annual 1989*, Vol. 4, edited by Olivier Jean Blanchard and Stanley Fischer, pp. 303–350, Cambridge, Mass.: MIT Press, 1989.
- <sup>26</sup> For more on a better path toward financial stability, see Haltom and Lacker (2014), and Lacker, Jeffrey M., “The Path to Financial Stability,” Speech to the Stanford Institute for Economic Policy Research at Stanford University, Stanford, Calif., February 11, 2014.

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