

# OPERATION TWIST-THE-TRUTH: HOW THE FEDERAL RESERVE MISREPRESENTS ITS HISTORY AND PERFORMANCE

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For a private-sector firm, success can mean only one thing: that the firm has turned a profit. No such firm can hope to succeed, or even to survive, merely by *declaring* that it has been profitable. A government agency, on the other hand, can succeed in either of two ways. It can actually accomplish its mission. Or it can simply *declare* that it has done so, and get the public to believe it.

That the Federal Reserve System has succeeded, in the sense of having prospered, is indisputable. At the time of its 100th anniversary, its powers are both greater and less subject to effective scrutiny than ever, while its assets, now exceeding \$3 trillion, make it bigger than any of the world's profit-oriented financial firms.<sup>1</sup> And, criticism from some quarters notwithstanding, the Fed enjoys a solid reputation. "The Federal Reserve," Paul Volcker observed recently, "is respected. And it's respected at a time when respect and trust in all our government institutions is all too rare. It's that respect and trust that, at the end of the day, is vital to the acceptance of its independence and to support for its policies" (Bordo and Roberds 2013: 400). Besides securing support for it at home, a Dallas Fed brochure

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<sup>1</sup>On the tremendous growth in the Fed's size and overall role in the U.S. financial system during the first year of the recent financial crises, see Stella (2009).

(FRBD1)<sup>2</sup> proudly declares, the Fed's status has caused "emerging democracies around the globe" to treat it as a model for their own monetary arrangements.

But what has the Fed's reputation to do with its actual performance? Not much, according to Milton Friedman. "No major institution in the U.S.," Friedman (1988) observed some years ago, "has so poor a record of performance over so long a period, yet so high a public reputation."<sup>3</sup> The Fed has succeeded, not by actually accomplishing its mission but by convincing the public that it has done so, through publicity that misrepresents both the Fed's history and its record.

What follows is a survey of such propaganda as it occurs in official Federal Reserve statements aimed at the general public, which are properly regarded as reflecting the views of "the Fed," rather than those of particular Fed employees.<sup>4</sup> In showing how Fed authorities misrepresent the Fed's record, I do not mean to suggest that they always do so intentionally. Group-think, conditioned by employees' natural desire to defend the institution they work for—or to at least avoid biting the hand that feeds them—undoubtedly play a part. But whatever the motives behind it, the misrepresentation in question harms the public, by causing it to overrate the status quo when considering possible reforms.

## Origins

No Fed propaganda has contributed more to its stature than that devoted to convincing the public that any other arrangement would have resulted in a less stable U.S. monetary system.

<sup>2</sup>To save space in citing sources, I refer to particular Federal Reserve Banks as "FRBX," where "X" is the initial of the particular Fed bank: A=Atlanta; B=Boston; Ch=Chicago; C=Cleveland; D=Dallas; K=Kansas City; M=Minnesota; NY=New York; P=Philadelphia; R=Richmond; SF=San Francisco; SL=St. Louis. Where I draw upon more than one undated online source from the same Fed Bank, I refer to each by its order of appearance among the undated references, e.g., "FRBP1"; "FRBP2," etc.

<sup>3</sup>Selgin, Lastrapes, and White (2012) review the Fed's performance for most of its first century.

<sup>4</sup>Such statements must be distinguished from research by Fed-employed economists aimed at other researchers, which despite being vetted by the Board of Governors reflects individual Fed economist's idiosyncratic opinions. Indeed, I frequently rely on such research in identifying misinformation in works by other Fed staff and officials that are intended for general readers.

To support this belief, the Fed has had to overcome the American public's long-standing resistance to the idea of having a central bank in the United States. The Fed's architects were able to do this easily enough, by denying that the Federal Reserve System was a central bank at all, and official Fed publications still vaunt its "decentralized" structure.<sup>5</sup> But the Banking Act of 1935, in making the newly constituted Board of Governors the acknowledged seat of Federal Reserve power, put paid to that conceit, forcing Fed apologists to instead insist that a central bank was, after all, the only arrangement capable of providing the nation with a stable currency system.

To take such a stand is to claim that the infirmities of the pre-Fed U.S. monetary system were the inevitable consequences of a lack of Fed oversight. "In the early years of our country," says the Philadelphia Fed's video "The Federal Reserve and You" (FRBP1), "there was very little supervision or regulation of banks at all." Consequently, the video continues, "financial crises and panics took their toll." Ben Bernanke, responding to a question raised by Congressman Ron Paul at a Congressional Hearing, likewise observed that the Fed was created because "there were big financial panics and there was no regulation there and people thought that was a big problem" (Bernanke 2009).

In an article on "The Founding of the Fed," the Federal Reserve Bank of New York (FRBNY1) refers specifically to the shortcomings of the U.S. monetary system between the demise of the second Bank of the United States and the outbreak of the Civil War. "For the next quarter century," the article observes,

America's central banking was carried on by a myriad of state-chartered banks with no federal regulation.<sup>6</sup> The difficulties brought about by this lack of a central banking authority hurt the stability of the American economy. There were often violent fluctuations in the volume of bank notes issued by banks and in the amount of demand deposits that the banks held. Bank notes, issued by the individual banks, varied widely in reliability.

<sup>5</sup>See, for example, Board of Governors (2013a, 2013b) and FRBP (2009).

<sup>6</sup>The writer seems to be under the impression that any currency-issuing institution qualifies as a "central bank."

According to the San Francisco Fed (FRBSF1), some of the banks in question “were known as ‘wildcat banks’ supposedly because they maintained offices in remote areas (‘where the wildcats are’) in order to make it difficult for customers to redeem their notes for precious metals.”

The suggestion such remarks convey of pre-Fed American banking as a free-for-all is, to put it mildly, extremely misleading. “The early years of the republic,” Bray Hammond (1957: 185–86) observes in his Pulitzer-prize-winning study of banking in antebellum America,

are often spoken of as if . . . government authority refrained from interference in business and benevolently left it a free field. Nothing of the sort was true of banking. Legislators hesitated about the kind of conditions under which banking should be permitted but never about the propriety and need of [sic] imposing regulations.

So far as the Federalists and Jeffersonians who dominated American politics at the time were concerned, “the issue was between prohibition and state control, with no thought of free enterprise.”<sup>7</sup>

Although the federal government withdrew from the banking business between 1836 and 1863, banking continued to be regulated by state authorities. That remained the case, moreover, despite “free banking” laws passed, first by Michigan (in 1837), and subsequently by 17 other states. Despite their name, which some Fed officials appear to take literally, and despite providing something akin to a general incorporation procedure for banks, these laws did not open the floodgates to unregulated banking. On the contrary, banks established under them were often subjected to more burdensome regulations than those common to charter-based arrangements (Ng 1988). Among other things, American “free” banks were universally prohibited from branching. They were also required to “secure” their notes with assets chosen by state regulators.

Thanks to research by Hugh Rockoff (1975) and Arthur Rolnick and Warren Weber (1983, 1984), among others, we now know that the “free-for-all” account of antebellum banking is about as faithful to reality as a 1950s Hollywood western. Fly-by-night banks were few and far between, and while many banks failed, the most common

<sup>7</sup>Hammond served for some time as the Board of Governors’ assistant secretary.

cause of failure, besides underdiversified loan portfolios that went hand-in-hand with unit banking, was heavy depreciation of the securities that some “free” bankers were forced to purchase in order to “secure” their notes.

Official Fed sources also fail to point out how antebellum banking regulations stood in the way of the establishment of a “uniform” U.S. currency. In a brief, sepia-toned segment of the Philadelphia Fed’s video, “The Federal Reserve and You” (FRBP1), a pair of farmers, complete with dungarees and open-crown hats, ponder a stack of state bank notes as they try to settle a sale, while a voice-over relates that there were 30,000 different kinds of notes in circulation back then (a much inflated figure, actually, unless one includes every sort of forged note), with certain notes commanding far less than their face value. What the video *doesn’t* say is that both the great variety of state banknotes and the discounts to which they were subject were further fruits of unit banking laws. In Scotland and elsewhere where, during that same era, note-issuing banks were allowed to establish nationwide branch networks, no special government intervention was needed to achieve a uniform currency.

The San Francisco Fed video also fails to mention how, despite unit banking, discounts on state banknotes had fallen to very modest levels by the early 1860s—so modest that, had someone in the autumn of 1863 been foolish enough to purchase every (non-Confederate) banknote in the country for its declared value, in order to sell the notes to a broker in New York or Chicago, that person’s loss would have amounted to less than 1 percent of the notes’ face value, even reckoning “doubtful” notes as worthless (Selgin 2003: 607–8).<sup>8</sup>

That improvement didn’t stop the northern government from passing legislation authorizing U.S. Treasury notes (“greenbacks”), establishing national banks, and subjecting outstanding state bank notes to a prohibitive 10 percent tax. As Fed sources point out, these measures did away with remaining banknote discounts, and so gave the United States an entirely uniform currency at last. But those sources (and many non-Fed writings also) misstate both the motivation behind the steps taken—which was actually that of replenishing the Union’s empty coffers—and the precise means by which discounts were

<sup>8</sup>This loss, it bears noting, is lower than that routinely incurred today by merchants who accept credit cards and by persons who draw cash from ATMs other than those belonging to their own bank.

eliminated. Despite what is often suggested, discounts didn't vanish simply because the notes of all national banks were subject to the same regulations and backed by government bonds. Those similarities alone couldn't have prevented national banks from applying discounts to rival banks' notes sufficient to cover the cost of returning them for payment. Instead, a provision of the 1864 National Bank Act, a revised version of the 1863 National Currency Act, simply compelled every national bank to accept other national banks' notes at par.<sup>9</sup>

That "bank runs and financial panics continued to plague the economy" after the Civil War is of course readily acknowledged by official Fed publications (FRBP2). The main reason for this, according to one of those sources, was "[t]he inability of the banking system to expand or contract currency in circulation or provide a mechanism to move reserves throughout the system" (FRBNY1). Here again Fed officials treat what was really a consequence of misguided regulation as having been due to a *lack* of regulation. In particular, instead of explaining how regulations kept national banks from issuing more currency when it was needed, engendering the notorious "inelasticity" of the U.S. currency stock, they blame that inelasticity on "the absence of a central banking structure" (ibid.). Put it that way and—presto!—a central bank becomes the only conceivable remedy.

In fact the U.S. currency stock might have been made perfectly elastic simply by doing away with barriers to branch banking and repealing Civil-War-era laws regulating banks' ability to issue notes, including the requirement that national banknotes be backed 110 percent by U.S. government bonds. (Those laws, it bears recalling, were part of the Union's strategy for funding the war, and as such were obsolete.) That such deregulation could have worked, and worked better than the Fed did, is strongly suggested by Canada's experience. Canada didn't have a central bank until 1935, yet it avoided the crises that rattled the U.S. economy in 1873, 1884, 1893, and 1907. Canada's relatively stable system consisted of several dozen nationally branched banks-of-issue, all of which were able to issue notes backed by their general assets, and subject to no further restriction save one (itself relaxed in 1907) based on their paid-in

<sup>9</sup>According to Selgin and White (1994), this Procrustean means for achieving a uniform currency turned national bank notes into "quasi-high-powered" money, undermining the routine clearing and redemption of rival banknotes that normally constrains overissue of notes in a competitive note issue arrangement.

capital. Canadian banks' relative freedom allowed them to meet both secular growth and seasonal peaks in currency demand, while nationwide branching, by facilitating note redemption, saw to the mopping-up of excess currency (Selgin and White 1994: 237–40).

Canada's example didn't go unnoticed by those seeking to fix the U.S. currency system, and quite a few legislative attempts were made—the Indianapolis, Carlisle, and Fowler plans among them—to replicate it. Alas, all were doomed, thanks in part to their call for branch banking, which was vigorously opposed by bankers in smaller towns as well as those in New York City. Main Street feared the competition to which branching would expose it, while Wall Street was anxious to hold on to the large correspondent balances that were a by-product of the status quo.<sup>10</sup>

It was only when Canadian-style currency reform proved a dead end that reformers generally abandoned it in favor of a central-bank based alternative. Instead of calling for deregulation of the existing banking and currency system, this alternative involved having a new bank (or, as it were, set of banks) vested with the exclusive right to both branch and issue notes backed by assets other than government bonds. Because the new banks, which were to do business only with established banks and the U.S. government, posed no direct threat to established banks, and because it left the structure of the commercial banking industry more or less unchanged, the new plan steered clear of concerted bankers' opposition. A central bank was, in short, no more than a second-best solution—if that—to the ills of the pre-1914 U.S. currency and banking system.

Yet one would never guess such from the Fed's own accounts of its history, which for the most part don't even mention Canada's successful arrangement, the various asset-currency plans inspired by it, or how banking industry insiders were instrumental in seeing to it that those plans were set aside in favor of a central-bank alternative. According to one of Ben Bernanke's recent George Washington University lectures (Bernanke 2012a), for example, it was only after the 1907 crisis "that Congress began to say, 'Well, wait a minute, maybe we need to do

<sup>10</sup>"The Federal Reserve System," Kolko (1963: 253) observes, "stabilized the financial power of New York within the economy, reversing the longer term trend toward decentralization by the utilization of political means of control over the central money market." See also Calomiris and Haber (2014), White (1989), and Williamson (1989).

something about this, maybe we need a central bank, a government agency that can address the problem of financial panics.”

## Independence

“Most studies of central bank independence,” a San Francisco Fed publication informs us, “rank the Fed among the most independent in the world” (FRBSF 1999a). The Fed’s independence is supposed to allow it to “conduct monetary policy with relative autonomy from the federal government,” especially by insulating its decisions “from short-term political influence” (FRBA3; see also Board of Governors 2013b). Particular arrangements that supposedly rule-out such “short-term political influence” include the fact that members of the Board of Governors serve staggered 14-year terms and the fact that the Fed, instead of relying on Congress for funding, uses its seigniorage revenue to cover its costs and pay shareholder dividends (Board of Governors 2013a, 2013b; FRBD2).

But despite these arrangements, and no matter how independent the Fed may be compared to other central banks, the truth is that it has always conducted monetary policy with an eye toward satisfying the desires of the general government. That the Fed was a mere handmaiden to the Treasury before 1951 is sufficiently obvious that at least one official Fed educational document concedes the point. “From its founding in 1913,” a Philadelphia Fed publication recognizes, “to the years up to and following World War II, the Fed largely supported the Treasury’s fiscal policy goals” (FRBP2).

Until 1935, the Secretary of the Treasury and his second-in-command, the Comptroller of the Currency, served as the chairman and vice-chairman, respectively, of the Federal Reserve Board. Although the Banking Act of 1935 removed Treasury representatives from what then became the Board of Governors, while establishing the present terms of appointment, it did not end the Treasury’s influence. On the contrary, that influence actually increased. “From 1935 to 1951,” Richard Timberlake (n.d.) observes, “the secretary of the treasury, with the compliance of Fed Board Chairman Marriner Eccles, continued to dominate Fed policies.” During World War II especially, and for some years afterwards, monetary policy again became entirely subordinated to the Treasury’s wants, with the Fed holding down interest rates on government securities by serving, in

effect, as the Treasury's bond buyer of last resort, which meant having monetary policy play second fiddle to government funding.

Fed outreach materials all agree, on the other hand, in proclaiming 1951 as the year in which the Fed achieved complete independence. "When the Korean War broke out," the aforementioned Philadelphia Fed publication observes,

Fed chairman William McChesney Martin again faced pressure from the Treasury to maintain low interest rates to help provide funds for the war effort. Martin, however, worked closely with the Treasury to break the long-standing practice of supporting government bond interest rates. Since then, the Fed has remained staunchly independent in its use of open market operations to support its monetary policy goals [FRBP2].

Actually, the Fed's chairman at the time of the so-called "Treasury Accord" was not Martin but Thomas B. McCabe. Martin took part in the Accord, not as the Fed's representative, but as the Treasury's, having at the time been its assistant secretary for monetary affairs. But let us not quibble. The big question is, did the Accord really free the Fed from politics? According to Robert Weintraub (1978: 354), the claim is "at best a half truth." The Accord allowed the Fed to reduce its Treasury purchases to the extent allowed by its agreement to swap unmarketable  $2\frac{3}{4}$  bonds for  $2\frac{1}{2}$  ones already outstanding. In turn the Fed promised to raise its discount rate only with the Treasury's permission, which was unlikely to be given except under "very compelling circumstances" (ibid.: 353-54).

As if to make clear who held the upper hand, days after the Accord was reached President Truman had chairman McCabe tender his resignation, appointing McChesney Martin in his place. Far from daring to flex the Fed's muscles, Martin proved a pushover when it came to resisting government influence (Meltzer 2003: 712). Although the Fed avoided inflation during most of the 1950s, that was so only because the decade was one of small government deficits (with occasional surpluses), and because Eisenhower, who succeeded Truman in 1953, was a resolute inflation hawk. When Kennedy and then Johnson took command, Martin had no trouble switching to the more activist and inflationary stance they favored, and although he did offer some resistance to Johnson's demand for further help in financing the Great Society programs and the

Vietnam War, that resistance proved too feeble to keep the inflation rate from rising (Cargill and O'Driscoll 2013).<sup>11</sup>

When Martin retired at last, his replacement, Arthur Burns, upheld Martin's doctrine of "independence within government." As if to render that meaning of that doctrine crystal-clear, during the 1971 election campaign Nixon and his staff pressured Burns to pursue an expansionary monetary policy, even though doing so might mean losing control of inflation, in part by leaking to the press that "the Federal Reserve would lose its independence if interest rates were not kept low" (Day 2013; see also Abrams 2006). Burns complied, with consequences that are all too well-known. He then went on to conduct monetary policy during the remaining Nixon, Ford, and Carter years "with the same political sensitivity" (Cargill and O'Driscoll 2013: 422).

Although Paul Volcker managed to rein in inflation and thereby restore the Fed's reputation as an independent agency devoted to keeping prices stable, he was able to do so only because he was backed by presidents who were themselves convinced that inflation had become the nation's top economic problem (*ibid.*: 423). "Political pressure," Cargill and O'Driscoll observe (*ibid.*), "is political pressure even if it happens to lead to correct policy."

More recently still, political pressure appears to have played a part in the Fed's ill-fated decision to keep interest rates low despite evidence of an overheating housing market. On the occasion of his testifying to the Financial Crisis Inquiry Commission, Alan Greenspan pointed out "that if the Federal Reserve had tried to slow the housing market amid a 'fairly broad consensus' about encouraging homeownership, 'the Congress would have clamped down on us'" (Cargill and O'Driscoll 2013: 424–25).<sup>12</sup>

<sup>11</sup>"We should be under no illusions," Martin told the governors prior to the vote; "a decision to move now can lead to an important revamping of the Federal Reserve System, including its structure and operating methods. This is a real possibility and I have been turning it over in my mind for months" (Board of Governors, minutes, December 3, 1965).

<sup>12</sup>Some steps taken during the subprime crisis have also tended to further undermine the Fed's already far from complete independence. In particular, the Supplementary Financing Program (SFP) set up by the Treasury in December 2007 to assist the Fed in sterilizing emergency loans it was then making, threatened, in the words of one commentator "to blur operational responsibility for monetary policy" (Stella 2009: 23). Despite its having been rendered redundant when the Fed gained the power to pay interest on bank reserves, the program still exists, although it is now officially "suspended." For more concerning how the Fed's conduct during the recent crisis compromised its already limited independence see Bordo (2010) and Cochrane (2012).

In short, while the Treasury Accord may ultimately have relieved the Fed of its former duty to serve as the Treasury's "bond buyer of last resort," it did not otherwise free monetary policy from political influence. Instead, as Weintraub (1978: 353) observes, Fed chairmen ever since McCabe have understood perfectly well that "a Chairman of the Federal Reserve Board who ignores the wishes of the President does so at his peril."

## Inflation and Deflation

Of the many challenges the Fed faces in trying to put a favorable spin on its record, none is more daunting than that of pretending that it has kept prices stable. The U.S. consumer price level was approximately the same when the Fed was founded as it was at the time of the dollar's establishment as the official U.S. monetary unit. It is now about 24 times higher. The dollar has thus lost over 96 percent of its pre-Fed value, with most of the loss occurring since 1971. Before then, the Fed was still somewhat constrained by an obligation to redeem its notes in gold.

Since the Fed can hardly deny outright that, by any reasonable measure, it has failed to keep prices stable, it must settle for suggesting that it has done so while carefully avoiding any reference to the actual course of prices since its establishment. A particularly flagrant instance of this approach occurs in the Atlanta Fed video "The Fed Explains Good versus Bad Standards" (FRBA2). That video starts by comparing the need for a reliable standard of value to that for reliable standards of weight and measurement. "Over the years," the narrator observes, "we have come to appreciate the importance of maintaining consistent standards in our measurements, and the measurement of value is no different. Keeping that standard stable is vital to keeping our economy operating at its maximum efficiency." Did the gold standard do the trick? "Not really," the narrator explains:

Fluctuations to [sic] the purchasing power of gold made gold a poor standard on which to base our measure of value, and that made trade difficult since no one knew what a dollar would buy from day to day. Eventually, the United States separated from the gold standard and Congress tasked the Federal Reserve to set its policies in order to maintain price stability. Now, the Fed is in charge of keeping the purchasing power of a dollar

stable so that when people want to buy or sell something everyone has a clear understanding of the measure of value.

The video implies—though it never *says*—that the dollar has been a more reliable “measure of value” since the Fed’s establishment, and particularly since 1971 (when the U.S. “separated” from the gold standard), than it was before. In a like manner, another Atlanta Fed video (FRBA1), shows a cartoon car (the real economy) heading along a road strewn with obstacles (the macroeconomic environment, presumably). “Because the Federal Reserve is keeping an eye on inflation,” a voice tells listeners, “you can keep an eye on the road.” In truth, of course, it has become both more necessary and more difficult for businessmen and consumers to keep track of inflation since 1914 than it was during most of the preceding century.<sup>13</sup>

When it isn’t claiming, implicitly or otherwise, to have prevented it, the Fed portrays inflation, not as evidence of its own lack of monetary restraint, but as a kind of menace-from-without, while portraying itself as a heroic, if not invincible, inflation fighter. “If the price level begins to rise too quickly,” the Atlanta Fed video tells listeners, “central banks, like the Federal Reserve, will *try* to adjust monetary policy in order to slow this advance of prices” (emphasis added). A still more blatant example of this tactic occurs in the New York Fed’s educational comic book, “The Story of Monetary Policy” (FRBNY 1999a; see also FRBNY 1999b), with its panel showing the Fed, depicted as a superhero—complete with blue bodysuit and yellow cape—thrusting an elbow into a Big Red Blob standing for “inflation.” Just where the blob came from is never explained, though readers might just as well assume that, like Superman’s nemesis Jax-Ur, it came from the planet Krypton.<sup>14</sup>

In view of the actual extent of inflation since 1914, the Fed might at least appear justified in claiming credit for avoiding *deflation*. Yet even that claim is misleading. It overlooks, first of all, the fact that several of the most notorious instances of deflation—including those of 1920–21, 1930–33, 1937–38, and 2008–09 (the last of which was

<sup>13</sup>On the substantial increase in price-level uncertainty since the Fed’s establishment see Selgin, Lastrapes, and White (2012: 570–74).

<sup>14</sup>In claiming to have done a good job combatting inflation the Fed in recent years has also taken advantage of the widespread treatment, which it has done much to encourage, of 2 percent inflation as “the new zero.”

severe relative to the then established trend of steadily rising prices)—took place *after* 1914. The claim also rests on the assumption, itself common in Fed publications, that deflation is necessarily a bad thing. “At first glance,” the San Francisco Fed’s “Dr. Econ” (FRBSF 2006) observes,

deflation might sound like a good thing—who would not like a world where things consumers buy get cheaper over time? However . . . in addition to falling prices of goods and services, other prices would be falling too. For instance, falling wages are likely to accompany falling prices (since wages are the price of labor). Should wages fail to adjust . . . then jobs could be lost as employers struggle to keep up with falling revenues.

Elsewhere Dr. Econ (FRBSF 1999b) observes that “Periods of deflation typically are associated with downturns in the economy,” quoting, with obvious approval, Samuelson and Nordhaus’s (1998) assertion that occasions “in which prices fall steadily over a period of several years, are associated with depressions.”

The trouble with this perspective is that it fails to recognize the existence of two very different sorts of deflation. “Bad” deflation happens when an insufficient level or growth rate of aggregate demand leads to a decline in equilibrium prices unconnected to any improvement in an economy’s productivity. “Good” deflation, on the other hand, reflects productivity improvements. Because good deflation, unlike the bad sort, goes hand-in-hand with falling unit production costs, it generally doesn’t entail falling profits, wage rates, or employment (Selgin 1997, Stern 2003).

In equating deflation with depression, Fed spokesmen ignore the possibility of good deflation, and so treat all deflation as demand-driven. In one of his GWU lectures, Ben Bernanke (2012a; compare Bernanke 2002) observes:

The sources of deflation are not a mystery. Deflation is in almost all cases a side effect of a collapse of aggregate demand—a drop in spending so severe that producers must cut prices on an ongoing basis in order to find buyers. Likewise, the economic effects of a deflationary episode, for the most part, are similar to those of any other sharp decline in aggregate spending—namely, recession, rising unemployment, and financial stress.

In fact the broader historical record shows that, far from being exceptional, supply-driven deflation was once far more common than the demand-driven sort (Atkeson and Kehoe 2004, Bordo and Filardo 2005). In particular, for most of the last quarter the 19th century, prices throughout the gold-standard bloc declined at a rate roughly reflecting declining real costs of production. Yet far from being symptomatic of a “long” or “great” depression, and notwithstanding occasional financial panics and the ululations of greenbackers and silverites, the deflation went hand-in-hand with robust long-term economic growth. Indeed, instead of inspiring still more rapid growth, as the Fed’s pronouncements might lead one to expect, the inflation that followed new gold discoveries of the 1890s brought a slowdown.

The Fed’s refusal to admit that deflation can be a good thing has had practical consequences beyond that of misleading the public. By preventing not only good (that is, productivity-driven) deflation, but good *disinflation*, in recent years, it may well have encouraged business cycles, particularly by contributing to the recent housing boom (Selgin, Beckworth, and Bahadir 2013). According to Alan Greenspan (2010), when the Fed decided, in 2003, to maintain a very low federal funds rate, “the probability of getting deflation . . . was less than fifty-fifty. But had it occurred, the impact would have been much too difficult to deal with.” That the source of deflation (or disinflation) “risk” was not a slackening of demand but surging productivity apparently didn’t matter. But it ought to have, for it meant that, instead of preventing a recession, the Fed’s decision fueled a boom.

## Financial Panics

As the Fed’s own accounts make clear, it was founded mainly for the purpose of putting an end to financial panics like those of 1893 and 1907. Those accounts are, however, not to be trusted when it comes to either understanding the nature of pre-Fed panics or assessing the Fed’s success in preventing others like them.

As we’ve seen, Fed sources routinely overlook the role misguided regulations played in causing or at least aggravating pre-Fed crises, blaming them instead on random outbreaks of unwarranted fear. “Occasionally,” the Dallas Fed says (FRBD 2006: 8),

the public feared that banks would not or could not honor the promise to redeem [their] notes, which led to bank runs. Believing that a particular bank’s ability to pay was

questionable, a large number of people in a single day would demand to have their banknotes exchanged for gold or silver. These bank runs created fear that often spread, causing runs on other banks and general financial panic. . . . Financial panics such as these occurred frequently during the 1800s and early 1900s.

In his opening GWU lecture Ben Bernanke (2012a) likewise speaks of panic spreading, like a cold, from one bank to the rest. “[I]f one bank is having problems,” he says, people “might begin to worry about problems in their bank. And so, a bank run can lead to widespread bank runs or a banking panic, more broadly.” To illustrate the point, Bernanke refers to the run on “Jimmy Stewart’s” (that is, George Bailey’s) perfectly solvent bank in “It’s a Wonderful Life.” Had the Federal Reserve been on the job, he says, Bailey wouldn’t have had to depend on the generosity of the good citizens of Bedford Falls.<sup>15</sup>

But the sort of financial panic that Bernanke’s “Frank Capra” theory describes happens *only* on TV (where, admittedly, it happens with alarming regularity, every December). Even in the pre-Fed U.S., which had more than its fair share of crises, bank-run “contagions” were not common, and those outbreaks that did occur were narrowly confined (Calomiris and Gorton 1991, Kaufman 1994, Tenzelides 1997). Instead of causing banks to fail, runs tended to be staged against banks that were already on the brink of failure. Nor were the system-wide runs that began in late February 1933 an exception, for those runs were due, not to indiscriminate panic but to a well-justified fear that FDR, upon assuming office, would devalue the dollar (Wigmore 1987).

Fed sources also give the impression that, because the Fed was *supposed* to put a stop to panics, it largely succeeded in doing so, whereas in truth panics were more common during the Fed’s first two decades than they’d been during the previous four (Wicker 1996, 2000; Jalil 2009). And though panics did disappear for a while after 1933, credit for that belongs, not to the Fed, but to the RFC and, after it, the FDIC and FSLIC.

<sup>15</sup>In fact, because the Bailey Building and Loan Association was a thrift rather than a bank, the Fed would not have had permission to lend to it until the summer of 1934, and even once it had that authority, it could not have accepted the Association’s mortgages as collateral for a discount window loan.

That deposit insurance was itself no panacea was made clear both by the S&L crisis of the 1980s, to which the FSLIC succumbed, and by the more recent subprime crisis. The Fed therefore continues to bear some responsibility for avoiding or containing panics. According to various official Fed sources, the responsible way for it to do so is by heeding the advice Walter Bagehot gives in *Lombard Street* (1873). Bagehot, Bernanke explains in his GWU lecture, “said that during a panic, [the] central bank should lend freely . . . against good assets.” The “good assets” rule is supposed to limit last-resort lending to solvent institutions, so as to avoid propping up insolvent ones. Bagehot also wanted borrowers to be charged “high” rates, to discourage them from borrowing simply for the sake of relending at a profit, and also (since he wrote in the days of the international gold standard) to attract gold from abroad.

Intriguingly, Bagehot had nothing to say about what we now know as the “moral hazard” problem—the problem of firms, and their creditors, taking greater risks because they anticipate being rescued. He didn’t have to say anything, because when he wrote the Bank of England, to which his strictures were aimed, was still a private firm with no inclination to lend to anyone of doubtful solvency. It was all Bagehot could do to try and get the profit-oriented Bank to lend to indisputably *solvent* firms just because they were desperately illiquid.

The Fed today is, of course, a horse of a very different color. Despite being nominally privately owned and paying dividends to its owners, its purpose isn’t to turn a profit, and its managers are rewarded not according to how profitable it is, but according to their perceived success in promoting price stability and high employment, among other goals.<sup>16</sup> Bureaucratic incentives therefore incline Fed officials, not to deny last-resort aid to firms that (according to Bagehot’s rules) qualify for such, but to make last-resort loans to firms that *don’t* qualify rather than risk being blamed for allowing a crisis to unfold. The moral hazard problem is therefore more than capable of rearing its ugly head.

<sup>16</sup>Nor would anyone want things to be otherwise: because the Federal Reserve’s “liabilities,” unlike the Bank of England’s in 1873, aren’t redeemable in gold (or in anything else), were it to maximize profits the result would be considerably greater inflation than the United States has actually experienced.

And so it has, thanks to the Fed's having lent money repeatedly, throughout the 1980s, to banks that were in fact insolvent (Schwartz 1991), and especially thanks to its having, with its rescue of Continental Illinois in 1984, officially embraced the notion that some financial institutions, solvent or not, are simply too big to fail (TBTF).<sup>17</sup> The Rubicon had been crossed. After that, creditors could hardly be blamed for assuming that, so long as a bank was sufficiently large or "systematically important," it might qualify for last-resort aid. Official Fed paeans to Bagehot thus came to be read as if there were an asterisk attached to them: "To get credit from us," the Fed was now widely understood to say, "you must *either* have good collateral *or* be strategically important." The risks inherent in this revision of Bagehot's rules were to become all too evident in the course of the next major crisis.

### The Subprime Crisis

The most recent financial crisis has allowed the Fed to achieve one of its most impressive PR feats, to wit: convincing the public that the crisis, instead of supplying more proof of its inadequacy, shows that it's now working better than ever. To accomplish this, the Fed has had to argue that, had it not been for its interventions, the outcome would have been much worse. Typical of this spin is San Francisco Fed President John C. Williams's (2012) observation that, at the end of 2008, the U.S. economy was

teetering on the edge of an abyss. If the panic had been left unchecked, we could well have seen an economic cataclysm as bad as the Great Depression, when 25 percent of the workforce was out of work. . . . Why then didn't we fall into that abyss in 2008 and 2009? The answer is that a financial collapse was not—I repeat, not—left unchecked. The Federal Reserve did what it was supposed to do.

But did the Fed really do everything "it was supposed to do" to contain the crisis? Is it even certain that its interventions made the crisis *no worse* than it would have been otherwise? There are good reasons for believing that the correct answer to both questions is "no."

<sup>17</sup>Subsequent investigations revealed that Continental Illinois' failure would actually have had only minor systemic consequences (Bédard 2012: 358–59).

The Fed was, first of all, “supposed” to command such superior information as ought to have allowed it to see the crisis, or at least *some* trouble, brewing. After all, according to the San Francisco Fed’s “Dr. Econ” (2001), “Federal Reserve operations and structure provide the System with some unique insights into the health of the financial system and the economy,” providing it “with firsthand knowledge of the conditions of financial institutions.” In fact Fed officials never saw what hit them. As the FOMC’s 2006 transcripts make clear, that committee was convinced at that late date both that a housing market downturn was unlikely and that, if such a downturn occurred, it would not do much damage to the rest of the economy. New York Fed President Timothy Geithner, for example, observed that “we just don’t see troubling signs yet of collateral damage, and we are not expecting much,” while Janet Yellen did not hesitate to congratulate outgoing Fed Chairman Alan Greenspan for leaving “with the economy in such solid shape” (Appelbaum 2012).

Besides not realizing that the boom was leading to a bust, the Fed encouraged it, and so contributed to the severity of the collapse, by maintaining an extremely low federal funds rate target in the wake of the 2001 crash. Even Fed officials hint at this. “During the early 2000s,” a Boston Fed education website (FRBB1) tells us, “low mortgage rates and expanded access to credit made homeownership possible for more people, increasing the demand for housing and driving up house prices”; while Federal Reserve Bank Vice President Jeff Fuhrer, speaking on the Philadelphia Fed video “The Federal Reserve and You” (FRBP1), observes that “when the Fed takes action to move interest rates up and down, it *almost always* has a significant effect on mortgage rates” (my emphasis).<sup>18</sup> It seems reasonable, in light of such claims, to conclude that the Fed did indeed stoke the boom, and that is indeed the conclusion many researchers, equipped with similar logic and corresponding evidence, have drawn.<sup>19</sup> Yet Fed spokesmen, instead of drawing the same conclusion, insist that what was “almost always” the case ceased to be so around 2003. According to them—and to Alan Greenspan and Ben

<sup>18</sup>Bernanke (2012a) likewise observed that “by raising the overnight interest rate, known as the federal funds rate, higher interest rates feed through the system and help to slow the economy by raising the cost of borrowing, of buying a house, of buying a car.”

<sup>19</sup>See Leijonhufvud (2009) and Taylor (2007, 2013)

Bernanke especially—low mortgage rates at that time were due to a “global saving glut” over which the Fed had no control.

Though it initially commanded some assent beyond the Fed, the savings glut hypothesis has since been subject to withering criticism. Among various counterarguments, perhaps the most fundamental is offered by Giancarlo Bertocco (2012; see also Borio and Disyatat 2011), who points out that, in a monetary (as opposed to barter) context, the global savings glut hypothesis isn’t an alternative to the domestic monetary policy hypothesis at all. “In a world with money,” Bertocco observes,

emerging economies can become savers [only by] selling goods to the developed country. . . . The origin of the mass of liquidity accumulated by emerging economies must therefore be [traced to] the decisions of the U.S. financial system which, by creating new money, financed the demand for goods which was fulfilled by emerging economies.

Home equity loans played no small part in financing the demand for imports of all kinds, and especially imports from China, thus contributing both to the U.S. trade imbalance and to the capital inflow that was that imbalance’s inescapable counterpart.

Nor did the Fed do everything it was supposed to do when it came to last-resort lending. Ben Bernanke, as we’ve noted, insists that in making last-resort loans, the Fed abides by Bagehot’s principles, the soundness of which he readily grants. In a 2012 speech, for example, he said that the recent crisis

is best understood as a classic financial panic—differing in details but fundamentally similar to the panics described by Bagehot [who] advised central banks . . . to respond to panics by lending freely against sound collateral. Following that advice, from the beginning of the crisis, the Fed . . . provided large amounts of short-term liquidity to financial institutions, including primary dealers as well as banks, on a broad range of collateral. . . . [T]hose actions were, again, consistent with the Bagehot approach of lending against collateral to illiquid but solvent firms [Bernanke 2012b].

Actually Bernanke’s Fed spurned Bagehot’s advice in at least one crucial way. It didn’t do so by granting last-resort loans to an

investment bank or even to nonfinancial firms: whatever the Fed's own standard practice may have been, Bagehot himself never insisted that last-resort lending be confined to banks. Nor was it necessarily inconsistent of the Fed to have rescued Bear and AIG but not Lehman, for although Lehman was certainly insolvent, some authorities (e.g. Cline and Gagnon 2013) maintain that Bear and AIG were solvent when the Fed came to their aid.<sup>20</sup> Nor, finally, was it merely that the Fed made last-resort loans at below-market rates or without securing those loans adequately—though it has been charged with doing both.<sup>21</sup> The main problem was that, even if the Fed did *intend* to confine its emergency lending to illiquid but solvent firms, as Bagehot's rule dictates, in its public pronouncements it justified its emergency lending, and its \$29 billion loan in support of Bear Stearns's acquisition in particular, not on the Bagehotian grounds that, having been denied credit elsewhere but having had good collateral to offer, the firms were entitled to it, but on the grounds that the firms it was aiding were too big (or "systematically important") to fail.

Explaining the Bear rescue to the Joint Economic Committee, for example, Ben Bernanke (2008a; see also Bernanke 2008b) testified:

Normally, the market sorts out which companies survive and which fail, and that is as it should be. However, . . . Bear Stearns participated extensively in a range of critical markets. With financial conditions fragile, the sudden failure of Bear

<sup>20</sup>The opinion is, however, controversial. "If Bear Stearns had been viewed as solvent by the financial community," the more common understanding has it, "JPMorgan may not have insisted on such a large government cushion to acquire the firm" (Sanati 2010). In justifying Bear's rescue to the Financial Inquiry Commission Treasury Secretary Paulson himself insisted that Bear was insolvent. "We were told Thursday night that Bear was going to file for bankruptcy Friday morning if we didn't act. So how does a solvent company file for bankruptcy?" (ibid.)

<sup>21</sup>See Hogan, Le, and Salter (2014), Humphrey (2010), and Labonte (2009). According to the last source, had the Fed's support of Bear Stearns's acquisition "been crafted as a typical discount window loan directly to JPMorgan Chase," rather than as an indirect loan through the Fed-created Limited Liability Corporation Maiden Lane 1, "JPMorgan Chase would have been required to pay back the principal and interest, and it (rather than the Fed) would have borne the full risk of any depreciation of Bear Stearn assets" (Labonte 2009:19). By taking on risk connected to Bear's acquisition, the Fed violated Bagehot's rule calling for last-resort loans to be fully secured. The same criticism can be made of its support of Citigroup and Bank of America (ibid.: 20–25).

Stearns likely would have led to a chaotic unwinding of positions in those markets and could have severely shaken confidence. The company's failure could also have cast doubt on the financial positions of some of Bear Stearns' thousands of counterparties and perhaps of companies with similar businesses. Given the current exceptional pressures on the global economy and financial system, the damage caused by a default by Bear Stearns could have been severe and extremely difficult to contain. Moreover, the adverse effects would not have been confined to the financial system but would have been felt broadly in the real economy through its effects on asset values and credit availability.

Tim Geithner, who was then president of the New York Fed, likewise stressed not Bear's solvency but the fact that allowing it to fail would have led to "a greater probability of widespread insolvencies, severe and protracted damage to the financial system and, ultimately, to the economy as a whole" (Labaton 2008).

A similar admixture of Bagehotian and TBTF criteria for central bank lending also occurs in various post-crisis Fed publications. According to the Federal Reserve Bank of San Francisco (FRBSF1), for example, Bear Stearns's failure would have

risked a domino effect that would have severely disrupted financial markets. To contain the damage, the Federal Reserve facilitated the purchase of Bear Stearns by the bank JPMorgan Chase by providing loans backed [*sic*] by certain Bear Stearns assets. Several months later, however, the investment bank Lehman Brothers collapsed because no private company was willing to acquire the troubled investment bank and Lehman did not have adequate collateral to qualify for direct loans from the Federal Reserve. As a result, financial panic threatened to spread to several other key financial institutions, including the giant insurance company American International Group (AIG). AIG played a central role guaranteeing financial instruments, so its failure had the potential to lead to a cascade of failures and a meltdown of the global financial system. To contain this threat, the Federal Reserve provided secured loans to AIG.

The trouble with such a mingling of Bagehotian and TBTF lending criteria is, as we have seen, that it raises a moral hazard. Bernanke

himself was fully aware of the danger. “Some particularly thorny issues,” he observed after the Bear rescue (Bernanke 2008b),

are raised by the existence of financial institutions that may be perceived as “too big to fail” and the moral hazard issues that may arise when governments intervene in a financial crisis. [Bear’s rescue was] necessary and justified under the circumstances that prevailed at that time. However, those events also have consequences that must be addressed. In particular, if no countervailing actions are taken, what would be perceived as an implicit expansion of the safety net could exacerbate the problem of “too big to fail,” possibly resulting in excessive risk-taking and yet greater systemic risk in the future. Mitigating that problem is one of the design challenges that we face as we consider the future evolution of our system.

In retrospect, however, it’s evident that the problem *wasn’t* “mitigated,” for Lehman’s counterparties, who were well aware of its troubles, clearly expected it to be rescued, and so took no adequate precautions against its going bankrupt.

Nor could the Fed claim that it had effectively guarded against any such expectation by means of an unambiguous statement of its last-resort lending policy. “In its nearly 100-year history,” Allan Meltzer observes (2012: 261), “the Fed has never announced its policy as lender of last resort. From the 1970s on, it acted on the belief that some banks were too-big-to-fail. Although the FOMC discussed last resort policy at times, the Fed never committed itself to a policy rule about assistance.”

Michael Lewis (2008) was among those who correctly anticipated the consequences of the Bear rescue. “Investment banks,” Lewis wrote just afterwards, “now have even less pressure on them than they did before to control their risks.” He continued:

There’s a new feeling in the Wall Street air: The big firms are now too big to fail. If the chaos that might ensue from Bear Stearns going bankrupt, and stiffing its counterparties on its billions of dollars of trades, is too much for the world to endure, the chaos that might be caused by Lehman Brothers Holdings Inc. or Goldman Sachs Group Inc. or Merrill Lynch & Co. or Morgan Stanley going bankrupt must also be too much to endure.

Already we may have seen one of the pleasant effects of this financial order: the continued survival of Lehman. What happened to Bear Stearns might well already have happened to Lehman. Any firm that uses each \$1 of its capital to finance \$31 of risky bets is at the mercy of public opinion. . . . Throw its viability into doubt and the people who lent them the other \$30 want their money back as soon as they can get it—unless they know that, if it comes to that, the Fed will make them whole. The viability of Lehman Brothers has been thrown into serious doubt, and yet Lehman Brothers lives, a tribute to the Fed’s new policy.

Unless they were somehow prevented from doing so by new regulations, Lewis (2008) went on to say, Lehman and other large investment banks would “use the implicit government guarantee to underwrite their relentless pursuit of incredible sums of money for themselves—and thus create problems for the Fed and the financial system that will make the undoing of Bear Stearns seem trivial.” For larger financial firms especially, market discipline did in fact deteriorate after the Bear Stearns bailout (Hett and Schmidt 2013). Lehman itself behaved as if its principal aim was to secure a place at the very top of the Fed’s critical list.

When the inevitable reckoning came, the Fed faced a stark choice: it could either abandon TBTF or set aside, more flagrantly than ever before, Bagehot’s call for lending only on good collateral. To the financial industry’s immense surprise, it took the former course, provoking a panic that was only compounded when Bernanke and Paulson, in attempting to get \$700 billion from Congress, warned that, without this assistance, the crisis “would threaten all parts of our economy.”<sup>22</sup>

<sup>22</sup>According to John Taylor (2008: 15–17), it appears to have been this testimony *rather than* Lehman’s failure itself that caused the crisis to deepen during the ensuing month. The FDIC’s decision, October 28th, to spare WaMu’s uninsured depositors at the expense of its secured creditors also appears to have contributed more than Lehman’s failure did to the late-October freeze-up of the wholesale credit market (Allison 2013: 75–77).

The direct collateral damage from Lehman’s bankruptcy proved far less extensive than government authorities claimed it would be. Instead of triggering the failure of thousands of counterparties, it led to the embarrassment of only one, when the Reserve Primary (money market) Fund, which held a large amount of Lehman’s securities, “broke the buck.” Other funds that held Lehman’s paper were able to cover their losses by drawing upon their parent companies.

Many Fed critics conclude that, having justified its rescue of Bear Stearns on too-big-to-fail grounds, the Fed ought also to have rescued Lehman. Others, however (Ayotte and Skeel 2010; Skeel 2009; Danielsson 2008) maintain that the Fed would have done still less harm by letting Bear itself go bankrupt, notwithstanding its having been solvent, for that would at least have suggested that the Fed was unwilling to take investment banks under its TBTF umbrella, and so would have given Lehman and its counterparties reason to prepare for that firm's bankruptcy.

The Fed also departed from Bagehot's advice by sterilizing its last-resort lending. Despite the rescues it undertook, it kept the total size of its balance sheet more or less unchanged, offsetting its emergency lending with corresponding sales of Treasury securities. Consequently, instead of adding to the overall supply of liquid funds, as it should have done were it following Bagehot's dicta (and as it had done, with good results, during past crises including Y2K and 9/11), the Fed chose to *redistribute* such funds from presumably solvent financial institutions to more doubtful ones (Labonte 2009: 28–29). Fed officials defend this course on the grounds that it allowed it to maintain its announced interest rate target. But the argument makes little sense, since in hindsight it seems clear that the occasion justified lowering the target. By sterilizing its emergency loans the Fed inadvertently contributed to the collapse of aggregate spending that was to transform the financial crisis into a full-fledged recession.

According to Daniel Thornton (2012: 8–10), the Fed's conduct was actually due, not to its desire to maintain an (excessively high) rate target, but to Fed officials' belief "that the market's ability to allocate efficiently was impaired." This rationale, too, was suspect, owing both to the "pretense of knowledge" that underlay it, and to the fact that, by assuming the new role of credit allocation, the Fed exposed itself "to the temptation to politicize its selection of recipients of its credit" (Bordo 2008: 8).

Whatever the reason for it, sterilized lending was, according to Thornton (a vice president of and economic advisor to the Federal Reserve Bank of St. Louis), a serious policy error. "I find it puzzling," he writes,

that the Fed decided not to increase the monetary base even though it was increasingly clear that the difficulties in the

financial markets and the economy were intensifying and financial markets were in need of additional credit. Increasing the monetary base would not have been a panacea, but increasing the availability of credit to the market would have facilitated the adjustment process significantly. In any event, not increasing the supply of credit by sterilizing the Fed's lending . . . produced no noticeable results. Financial market and economic conditions continued to deteriorate, risk spreads remained high, and on March 14, 2008, the Fed participated in a bailout of Bear Stearns [Thornton 2012: 8–9].

After Lehman failed the Fed ceased to sterilize its lending, allowing the federal funds rate to approach zero. But it also welcomed two new measures that prevented its new stance from contributing to any substantial increase in overall lending and spending. These measures consisted, first, of the Treasury's Supplementary Financing Program (SFP) and, second, of legislation allowing the Fed to begin paying interest on bank reserves. Under the SFP, which began on September 17th and was supposed to be short-lived, the Treasury effectively started doing the Fed's sterilizing for it, by issuing short-term "cash management bills" and parking the proceeds in special Fed bank accounts (Stella 2009). By paying interest on bank reserves, which it began doing on October 6th, the Fed encouraged banks to hold on to excess reserves instead of lending them, further dampening the effect of the Fed's easing.<sup>23</sup>

These restrictive measures were once again defended on the grounds that they helped the Fed to implement its desired monetary policy. "Interest on reserves," the Board of Governors (2008) informed the press, "will permit the Federal Reserve to expand its balance sheet as necessary to provide the liquidity necessary to support financial stability while implementing the monetary policy that is appropriate in light of the System's macroeconomic objectives of maximum employment and price stability." More specifically, the step was made necessary, the press release goes on to say, because the Open Market Desk had "encountered difficulty achieving the operating target for the federal funds rate set by the FOMC,"

<sup>23</sup>That the interest rate payments were modest does not mean that dampening was trivial. According to Ireland (2012), even a small increase in the interest rate paid on bank reserves could result in a large increase in banks' demand for excess reserves.

because of the large increase in reserve balances the Fed's various emergency lending facilities had sponsored over the course of the preceding weeks:

Essentially, paying interest on reserves allows the Fed to place a floor on the federal funds rate, since depository institutions have little incentive to lend in the overnight interbank federal funds market at rates below the interest rate on excess reserves. This allows the Desk to keep the federal funds rate closer to the FOMC's target rate than it would have been able to otherwise.

A Federal Reserve Bank of San Francisco educational resource summed up the Fed's strategy thus:

The Fed's new authority gave policymakers another tool to use during the financial crisis. Paying interest on reserves allowed the Fed to increase the level of reserves and still maintain control of the federal funds rate (FRBSF 2013).

Where to begin? The Fed can always "expand its balance sheet" as much as it wishes, without regard to the federal funds rate, by purchasing assets, as it has done during the various rounds of quantitative easing (QE). And interest on reserves wasn't needed to "place a floor on the federal funds rate": it merely served to raise the floor—that is, the rate at which banks ceased to have any incentive to extend overnight credit to other banks—from zero to some positive value. As a solution to the "zero lower bound" problem, this was akin to raising the pavement around skyscrapers to their second story, so as not to have to worry about jumpers ever reaching the ground.

The Fed's decision to reward banks for not lending in the midst of a liquidity crunch was eerily reminiscent of one of its more notorious Great Depression blunders: its decision to double banks' minimum reserve requirement starting in 1936, just when a recovery was at last getting under way. According to many economists, that decision helped to trigger the "Roosevelt Recession" of 1937–38.

## The Recovery

The spin Fed sources put on its conduct during the subprime crisis is matched by their misleading portrayal of its role in the post-

crisis recovery. According to official accounts, thanks to the Fed's actions the economy has recovered more rapidly and more fully than it could possibly have done without the Fed's help. "Uncertainty," Cleveland Fed President Sandra Pianalto (2013) observed last spring, has

been restraining the economy. Businesses have been hesitant to hire workers and make investments [while] lenders have also become more cautious. . . . In this environment, the Federal Reserve has taken aggressive and unconventional actions to nudge the U.S. economy back to self-sustaining health. . . . Clearly, the FOMC's policies have been beneficial in increasing economic growth.

In truth, it's far from "clear" that Fed policies have contributed much to the post-2008 recovery. Both theory and experience suggest, first of all, that thanks to adjusting prices and expectations economies *eventually* recover from contractions brought about by reduced lending and spending even if nothing is done to actually restore spending to its former level. What's more, recoveries are usually rapid: in the course of his George Washington University lectures, Bernanke (2012a) observed that "if you look at recessions in the postwar period in the United States, you see very frequently that recoveries only take a couple of years . . . and in fact, very sharp [recessions] are typically followed by a faster recovery." What Bernanke didn't say is that, according to the latest careful studies, and setting aside the recent recession, contractions generally lasted no longer, and recoveries were no slower, during the four decades before the Fed's establishment than they have been since World War II (Romer 1999, Davis 2006). As for the generally disastrous interwar period, it also involved one relatively rapid recovery—from the sharp 1920–21 downturn—to which the Fed contributed very little, if anything at all.

The post-2008 recovery, in contrast, has been painfully slow. Moreover, by some measures at least, it is still far from complete. The Fed's attempts to take credit for it consequently bring to mind an episode of *The Beverly Hillbillies* (a 1960s TV show, in case you're under 50) in which the local doctor is impressed when Granny reveals that she's got a cure for the common cold—a potion that, she says, has worked like a charm for half a century. It's only at the end of the episode that Granny explains that, by "working like a charm,"

she means that all you have to do is take a swig, and in a week to ten days you're as good as new. The difference is that, to judge by the pace of recovery alone, the potions the Fed has been administering to America's ailing economy since the fall of 2008, instead of merely doing nothing, appear to have made it sicker.

This isn't to deny that the Fed *might* have hastened the recovery if, during late 2007 and the first half of 2008, it had acted to preserve economy-wide liquidity instead of making sterilized loans aimed at bolstering particular firms and markets. According to Thornton (2012: 25), the Fed did provide some help through its Term Auction Facility, though it's having done so at subsidized rates—yet another violation of Bagehot's rules—was “troublesome.” But not until after mid-March 2009 did it began expanding the monetary base aggressively, by its first round of QE. By that late date, however (Thornton observes), aggressive easing was no longer justified: financial markets had already stabilized; risk-spreads had declined considerably; and the TAF auctions were undersubscribed. By June, according to the NBER's reckoning, the contraction had already ended (*ibid*: 14).

Instead of promoting recovery, Thornton claims, the Fed's aggressive but belated expansion hampered it by adding to the very uncertainty that Cleveland Fed President Pianalto bemoans.<sup>24</sup> “Most economists agree,” Thornton observes (*ibid*: 18),

that if important policymakers were to tell the public that we could be facing the next Great Depression, consumption would sink like a rock. . . . In a similar vein, I believe an “extreme” policy stance, such as the one the FOMC has pursued since late 2008 and indicates that it will continue until late 2014, generates expectations that the economy is much worse than it might otherwise appear. This expectations effect will be particularly important when the actions are

<sup>24</sup>Fed (and FDIC) regulators also contributed to what President Pianalto refers to as bankers' “more cautious” approach to lending. According to John Allison (2013: 138), the former CEO of BB&T, ever since the crisis the Fed's examiners, in a classic case of slamming the barn door shut after the horses have bolted, have been “making it more difficult for banks to extend new loans and to work with existing business borrowers who are struggling, especially any business with debt related to real estate.”

taken at a time when there are significant signs that financial markets are stabilizing and the economy is improving.

Among other things, the “expectations effects” of the Fed’s unorthodox policies gave banks and other firms a greater inclination than ever to hold cash rather than invest it, undermining the potential for QE to either reduce long-term rates or revive aggregate demand. Instead, the easing served merely to further redistribute credit, while dramatically enhancing the Fed’s share of the total extent of financial intermediation.

Despite such criticisms, the belief that the Fed “saved us from another Great Depression” (Li 2013) is now well on its way to becoming conventional wisdom. The Fed has thus managed to achieve what is surely its greatest PR coup of all. It has taken its most notorious lemon, and made lemonade from it.

## References

- Abrams, B. A. (2006) “How Richard Nixon Pressured Arthur Burns: Evidence from the Nixon Tapes.” *Journal of Economic Perspectives* 20 (4): 177–88.
- Allison, J. A. (2013) *The Financial Crisis and the Free Market Cure*. New York: McGraw-Hill.
- Appelbaum, B. (2102) “Inside the Fed in 2006: A Coming Crisis, and Banter.” *New York Times* (12 January).
- Atkeson, A., and Kehoe, P. J. (2004) “Deflation and Depression: Is There an Empirical Link?” *American Economic Review* 94 (2): 99–103.
- Ayotte, K., and Skeel Jr., D. A. (2010) “Bankruptcy or Bailouts?” *Journal of Comparative Law* 33 (5): 469–98.
- Bagehot, W. (1873) *Lombard Street: A Description of the Money Market*. London: Henry S. King.
- Bédard, M. (2012) “Are Dominoes a Good Metaphor for Systemic Risk in Banking?” *International Journal of Business* 17 (4): 352–64.
- Bernanke, B. (2002) “Deflation: Making Sure ‘It’ Doesn’t Happen Here.” Remarks by Governor Ben S. Bernanke before the National Economists Club, Washington, D.C., November 21. Available at [www.federalreserve.gov/boarddocs/speeches/2002/20021121](http://www.federalreserve.gov/boarddocs/speeches/2002/20021121).

- \_\_\_\_\_ (2008a) “The Economic Outlook.” Testimony before the Joint Economic Committee, April 2.
- \_\_\_\_\_ (2008b) “Reducing Systemic Risk.” Federal Reserve Bank of Kansas City Economic Policy Symposium, Jackson Hole, Wyo., August 22.
- \_\_\_\_\_ (2009) Testimony before the House Committee on Financial Services. Hearing on Oversight of the Government’s Intervention at American International Group, March 24.
- \_\_\_\_\_ (2012a) “The Federal Reserve and the Financial Crisis.” Lecture series, George Washington School of Business. Washington, D.C., March 20, 22, 27, and 29.
- \_\_\_\_\_ (2012b) “Some Reflections on the Crisis and the Policy Response.” Speech given at the Russell Sage Foundation and the Century Foundation Conference on “Rethinking Finance,” New York, April 13.
- Bertocco, G. (2012) “Global Saving Glut and Housing Bubble: A Critical Analysis.” Università dell’Insubria Focalta di Economia.
- Board of Governors of the Federal Reserve System (2008) Press Release, October 6.
- \_\_\_\_\_ (2013a) “The Structure of the Federal Reserve System.” Available at [www.federalreserve.gov/pubs/frseries/frseri.htm](http://www.federalreserve.gov/pubs/frseries/frseri.htm).
- \_\_\_\_\_ (2013b) “What Does It Mean that the Federal Reserve Is ‘Independent within the Government’?” *Current FAQs: Informing the Public about the Federal Reserve*. Available at [www.federalreserve.gov/faqs/about\\_12799.htm](http://www.federalreserve.gov/faqs/about_12799.htm).
- Bordo, M. D. (2008) “Comment on Charles Calomiris’ ‘The Subprime Turmoil: What’s Old, What’s New, What’s Next?’” Federal Reserve Bank of Kansas City Symposium, *Maintaining Stability in a Changing Financial System*, Jackson Hole, Wyo., August 21–23.
- \_\_\_\_\_ (2010) “The Federal Reserve: Independence Gained, Independence Lost.” Shadow Open Market Committee, March 26.
- Bordo, M. D., and Filardo, A. (2005) “Deflation in a Historical Perspective.” BIS Working Paper No. 186 (November). Basel: Bank for International Settlements.
- Bordo, M. D., and Roberds, W., eds. (2013) *The Origins, History, and Future of the Federal Reserve: A Return to Jekyll Island*. Cambridge: Cambridge University Press.

- Borio, C., and Disyatat, P. (2011) "Global Imbalances and the Financial Crisis: Link or No Link?" BIS Working Paper No. 346. Basel: The Bank for International Settlements (May).
- Calomiris, C. W., and Gorton, G. (1991) "The Origins of Bank Panics: Models, Facts, and Bank Regulation." In G. Hubbard (ed.) *Financial Markets and Financial Crises*. Chicago: University of Chicago Press and NBER.
- Calomiris, C. W., and Haber, S.H. (2014) *Fragile by Design: The Political Origins of Banking Crises and Scarce Credit*. Princeton, N.J.: Princeton University Press.
- Cargill, T. F., and O'Driscoll Jr., G. P. (2013) "Federal Reserve Independence: Reality or Myth?" *Cato Journal* 33 (3): 417–35.
- Cline, W. R., and Gagnon, J. E. (2013) "Lehman Died, Bagehot Lives: Why Did the Fed and Treasury Let a Major Wall Street Bank Fail?" Peterson Institute for International Economic *Policy Brief* (September).
- Cochrane, J. (2012) "Fed Independence 2025." *The Grumpy Economist* (19 February). Available at <http://johnhcochrane.blogspot.com/2012/02/fed-independence-2025.html>.
- Danielsson, J. (2008) "The Bankruptcy of Bear Stearns Would Have Been a Good Lesson." *The Telegraph* (25 March).
- Davis, J. H. (2006) "An Improved Chronology of U.S. Business Cycles since the 1790s." *Journal of Economic History* 66 (1): 103–21.
- Day, S. A. (2013) "Arthur Burns." In D. A. Dieterle (ed.) *Economic Thinkers: A Biographical Encyclopedia*, 37–39. Santa Barbara, Calif.: Greenwood.
- Federal Reserve Bank of Atlanta (1) "The Fed Explains Inflation." Available at [www.frbatlanta.org/news/multimedia/12fedExplained\\_inflation.cfm](http://www.frbatlanta.org/news/multimedia/12fedExplained_inflation.cfm).
- \_\_\_\_\_ (2) "The Fed Explains Good versus Bad Standards." Available at [www.frbatlanta.org/news/multimedia/131002\\_fedExplained\\_measurements\\_transcript.cfm](http://www.frbatlanta.org/news/multimedia/131002_fedExplained_measurements_transcript.cfm).
- \_\_\_\_\_ (3) "Standards for Teaching about FRS." Available [www.frbatlanta.org/edresources/standards/teachingfrs](http://www.frbatlanta.org/edresources/standards/teachingfrs).
- Federal Reserve Bank of Boston (1) "History of the Federal Reserve." Available at [www.federalreserveeducation.org/about-the-fed/history](http://www.federalreserveeducation.org/about-the-fed/history).
- Federal Reserve Bank of Dallas (2006) "The Fed: The Federal Reserve, Monetary Policy, and the Economy" (May).

- \_\_\_\_\_ (1) “The Fed Today.” Available at [www.dallasfed.org/fed/understand.cfm](http://www.dallasfed.org/fed/understand.cfm).
- \_\_\_\_\_ (2) “Understanding the Fed.” Available at [www.dallasfed.org/fed/understand.cfm](http://www.dallasfed.org/fed/understand.cfm).
- Federal Reserve Bank of New York (1999a) “The Story of Monetary Policy.” (Comic Book)
- \_\_\_\_\_ (1999b) “The Story of Monetary Policy.”
- \_\_\_\_\_ (1) “The Founding of the Fed.” Available at [www.newyorkfed.org/aboutthefed/history\\_article.html](http://www.newyorkfed.org/aboutthefed/history_article.html).
- Federal Reserve Bank of Philadelphia (2009) “Out of Many . . . One: 2009 Annual Report.” Available at [www.philadelphiafed.org/publications/annual-report/2009/structure-and-governance.cfm](http://www.philadelphiafed.org/publications/annual-report/2009/structure-and-governance.cfm).
- \_\_\_\_\_ (1) “The Federal Reserve and You” (Video). Available at [www.phil.frb.org/education/federal-reserve-and-you](http://www.phil.frb.org/education/federal-reserve-and-you).
- \_\_\_\_\_ (2) “The Fed Today.” Available at [www.philadelphiafed.org/publications/economic-education/fed-today/fed-today\\_lesson-2.pdf](http://www.philadelphiafed.org/publications/economic-education/fed-today/fed-today_lesson-2.pdf).
- Federal Reserve Bank of San Francisco (1999a) “U.S. Monetary Policy: An Introduction.” *Economic Letter* (1 January).
- \_\_\_\_\_ (1999b) “What Is Deflation and How Is It Different from Disinflation?” *Dr. Econ* (September).
- \_\_\_\_\_ (2001) “Does a Central Bank Have More Information about the Economy than the Government, and, If So, What Type of Information?” *Dr. Econ* (December).
- \_\_\_\_\_ (2006) “What Are the Costs of Deflation?” *Dr. Econ* (February).
- \_\_\_\_\_ (2013) “Why Did the Federal Reserve Start Paying Interest on Reserve Balances Held on Deposit at the Fed? Does the Fed Pay Interest on Required Reserves, Excess Reserves, or Both? What Interest Rate Does the Fed Pay?” *Dr. Econ* (March).
- \_\_\_\_\_ (1) “The Economy: Crisis and Response.” Available at <http://sffed-education.org/econanswers/portal.htm>.
- \_\_\_\_\_ (2) “What Is the Fed: History.” Available at [www.frbsf.org/education/teacher-resources/what-is-the-fed/history](http://www.frbsf.org/education/teacher-resources/what-is-the-fed/history).
- Friedman, M. (1988) “The Fed Has No Clothes.” *Wall Street Journal* (15 April).
- Greenspan, A. (2010) “The Crisis.” *Brookings Papers in Economic Activity* 41(1): 201–46.

- Hammond, B. (1957) *Banks and Politics in American from the Revolution to the Civil War*. Princeton, N.J.: Princeton University Press.
- Hett, F., and Schmidt, A. (2013) “Bank Rescues and Bailout Expectations: The Erosion of Market Discipline during the Financial Crisis.” SAFE Working Paper No. 36 (August).
- Hogan, T. L.; Le, L.; and Salter, A. W. (2014) “Ben Bernanke and Bagehot’s Rules.” *Journal of Money, Credit, and Banking*, forthcoming.
- Humphrey, T. M. (2010) “Lender of Last Resort: What It Is, Whence It Came, and Why the Fed Isn’t It.” *Cato Journal* 30 (2): 333–64.
- Ireland, P. (2012) “The Macroeconomic Effects of Interest on Reserves.” Boston College Working Paper (September). Available at [www.bc.edu/ec-p/wp772.pdf](http://www.bc.edu/ec-p/wp772.pdf).
- Jalil, A. (2009) “A New History of Banking Panics in the United States 1825–1929: Construction and Implications.” Working Paper (November).
- Kaufman, G. C. (1994) “Bank Contagion: A Review of the Theory and Evidence.” *Journal of Financial Services Research* 8 (2): 123–50.
- Kolko, G. (1963) *The Triumph of Conservatism: A Reinterpretation of American History, 1900–1916*. New York: The Free Press.
- Labaton, S. (2008) “Testimony Offers Details of Bear Stearns Deal.” *New York Times* (4 April).
- Labonte, M. (2009) “Financial Turmoil: Federal Reserve Policy Responses.” *CRS Report for Congress*. Washington: Congressional Research Service (10 July).
- Leijonhufvud, A. (2009) “Out of the Corridor: Keynes and the Crisis.” *Cambridge Journal of Economics* 33 (4): 741–57.
- Lewis, M. (2008) “How Bernanke’s Banker Rescue Spells Their Demise.” Bloomberg (10 June).
- Li, V. (2013) “The Right Man at the Right Time.” *U.S. News & World Report* (19 August).
- Meltzer, A. H. (2003) *A History of the Federal Reserve: Vol. 1: 1913–1951*. Chicago: University of Chicago Press.
- \_\_\_\_\_ (2012) “Federal Reserve Policy in the Great Recession.” *Cato Journal* 32 (2): 255–63.
- Ng, K. (1988) “Free Banking Laws and Barriers to Entry in Banking, 1838–1860.” *Journal of Economic History* 48 (4): 877–89.

- Pianalto, S. (2013) "The Federal Reserve's Role in Supporting the U.S. Economy." Speech at the International Economic Forum of the Americas, West Palm Beach, Fla., April 8.
- Rockoff, H. (1975) *The Free Banking Era: A Re-Examination*. New York: Arno Press.
- Rolnick, A. J., and Weber, W. E. (1983) "New Evidence on the Free Banking Era." *American Economic Review* 73 (5): 1080–91.
- \_\_\_\_\_ (1984) "The Causes of Free Bank Failures: A Detailed Examination." *Journal of Monetary Economics* 14(3): 267–91.
- Romer, C. D. (1999) "Changes in Business Cycles: Evidence and Explanations." *Journal of Economic Perspectives* 13 (2): 23–44.
- Samuelson, P. A., and Nordhaus, W. D. (1998) *Economics*. 16th ed. New York: McGraw-Hill.
- Sanati, C. (2010) "Paulson Rejects Claim that Bear Was Solvent." *New York Times* (6 May).
- Schwartz, A. J. (1991) "The Misuse of the Fed's Discount Window." Federal Reserve Bank of St. Louis *Review* 74: 58–69.
- Selgin, G. (1997) *Less than Zero: The Case for a Falling Price Level in a Growing Economy*. London: Institute of Economic Affairs.
- \_\_\_\_\_ (2003) "The Suppression of State Banknotes: A Reconsideration." *Economic Inquiry* 38 (4): 600–15.
- Selgin, G.; Beckworth, D.; and Bahadir, B. (2013) "The Productivity Gap: Monetary Policy, the Subprime Boom, and the Post-2001 Productivity Surge." Working Paper.
- Selgin, G.; Lastrapes, W. D.; and White, L. H. (2012) "Has the Fed Been a Failure?" *Journal of Macroeconomics* 34 (3): 569–96.
- Selgin, G., and White, L. H. (1994) "Monetary Reform and the Redemption of National Bank Notes, 1863–1913." *Business History Review* 68 (2): 205–43.
- Skeel, D. (2009) "Give Bankruptcy a Chance." *The Weekly Standard* (29 June–6 July).
- Stella, P. (2009) "The Federal Reserve System Balance Sheet: What Happened and Why It Matters." IMF Working Paper (May).
- Stern, G. H. (2003) "Should We Accept the Conventional Wisdom about Deflation?" Federal Reserve Bank of Minneapolis *The Region* (1 September).
- Taylor, J. B. (2007) "Housing and Monetary Policy." Federal Reserve Bank of Kansas City Economic Policy Symposium, Jackson Hole, Wyo., September 1.

- \_\_\_\_\_ (2008) “The Financial Crisis and the Policy Responses: An Empirical Analysis of What Went Wrong.” In *A Festschrift in Honour of David Dodge*, 1–18. Ottawa: The Bank of Canada (November).
- \_\_\_\_\_ (2013) “Reviewing the ‘Too Low for Too Long’ Evidence.” *Economics One Blog* (19 October): <http://economicsone.com/2013/10/19/reviewing-the-too-low-for-too-long-evidence>.
- Temzelides, T. (1997) “Are Bank Runs Contagious?” Federal Reserve Bank of Philadelphia *Business Review* (November/December): 3–14.
- Thornton, D. (2012) “The Federal Reserve’s Response to the Financial Crisis: What It Did and What It Should Have Done.” Federal Reserve Bank of St. Louis Working Paper (October).
- Timberlake, R. H. (n.d.) “Federal Reserve System.” *The Concise Encyclopedia of Economics*. Available at [www.econlib.org/library/Enc/FederalReserveSystem.html](http://www.econlib.org/library/Enc/FederalReserveSystem.html).
- Weintraub, R. E. (1978) “Congressional Supervision of Monetary Policy.” *Journal of Monetary Economics* 4 (April): 341–62.
- White, E. N. (1989) *The Regulation and Reform of the American Banking System, 1900–1929*. Princeton, N.J.: Princeton University Press.
- Wicker, E. (1996) *The Banking Panics of the Great Depression*. Cambridge: Cambridge University Press.
- \_\_\_\_\_ (2000) *Banking Panics of the Gilded Age*. Cambridge: Cambridge University Press.
- Wigmore, B. A. (1987) “Was the Bank Holiday of 1933 Caused by a Run on the Dollar?” *Journal of Economic History* 47 (3): 739–55.
- Williams, J. C. (2012) “The Federal Reserve and the Economic Recovery” Federal Reserve Bank of San Francisco *Economic Letter* (17 January).
- Williamson, S. D. (1989) “Bank Failures, Financial Restrictions, and Aggregate Fluctuations: Canada and the United States, 1870–1913.” Federal Reserve Bank of Minneapolis *Quarterly Review* 13 (3): 20–40.