The Villain

Roger Lowenstein
The Altantic

April 2012

THE U.S. FEDERAL RESERVE was founded 99 years ago, as a bulwark to the banking system and an antidote to its frequent runs and panics. Strictly speaking, it was America's third attempt at a central bank. The first, organized by Congress in 1791, was allowed to expire after 20 years, leaving the young republic with only a patchwork system of weaker state banks. During the War of 1812, Congress realized its error (in the absence of a central bank, inflation had run rampant), and in 1816, it chartered a second bank, again for 20 years. The Second Bank of the United States was, in the main, a success. Its notes were circulated as currency, and it astutely managed their supply so as to keep the economy humming. Alas, President Andrew Jackson, a fierce opponent of both paper money and national banks, campaigned in 1832 against renewal of the charter, and indirectly against the bank's brilliant but impetuous head, Nicholas Biddle. Resentment against financiers was running high, and the election became a referendum on the genteel Philadelphia banker versus the rough-hewn war hero—and a referendum on the bank itself. Jackson won, and the Second Bank was, per his promise, destroyed. The U.S. economy promptly plunged into a severe depression. Biddle died not long after, in semi-disgrace, but the battle between bankers and populists never went away.

None of the invective heaped, of late, on Ben Bernanke would have come as a surprise to Biddle, and one doubts whether the Fed would fare much better with the electorate today than the Second Bank did in the 19th century. Bernanke himself certainly would not win a popularity contest. In 2010, four years after his appointment by President George W. Bush as Fed chief, he was approved for a second term by a Senate vote of 70 to 30—the slimmest margin for a Fed chief ever. (In 2000, Alan Greenspan won a fourth term by a vote of 89 to 4.) Bernanke's troubles with politicians were a direct result of his sagging poll numbers, and since his reappointment these numbers have only gotten worse. In a Bloomberg poll last September, only 29 percent of respondents expressed a favorable opinion of Bernanke; 35 percent had an unfavorable view. In October, just 40 percent of those surveyed by Gallup said they had confidence in Bernanke's ideas for creating jobs; even congressional leaders inspired greater faith.

Over the past four and a half years, Bernanke, 58, has presided over the most sustained period of crisis of any civilian official in recent history, with the fate of millions of unemployed and underemployed Americans hanging in the balance. Only recently has the economy begun to show signs that the recovery is gaining steam. Since August 2007, Bernanke has deployed the Fed as the lender of last resort to the banking system and worked overtime to furnish an "elastic currency"—that is, to keep enough money

in circulation for the economy to function. These were the very tasks that the founders of the Fed envisioned. Bernanke has performed them by tripling the size of the Fed's balance sheet—to an eye-popping $2.9 trillion—and by inventing a welter of new programs to lend to banks and other private-sector institutions. For most of the Fed's history, popular opinion—being generally opposed to depressions—has favored such efforts, but today the public's disgust with government, and with banks, has cast a shadow of suspicion upon Bernanke. Ron Paul touched a chord when he asked, in November 2010, how the Fed could create $600 billion "with the stroke of a pen." So did Michele Bachmann, grilling Bernanke at a congressional hearing a few months after the crash, when she queried, "Do you believe there are any limits on the authority that the Federal Reserve has taken since March 2008?"

Bernanke's unconventional programs have been implemented in two phases. During the financial crisis of 2007–09, he bailed out a handful of large banks and devised a series of innovative lending operations to disperse credit to banks, small businesses, and consumers (virtually all of these loans have been repaid at a profit to taxpayers). He also lowered short-term interest rates to nearly zero and made private banks run a gantlet of stress tests to ensure some minimal level of solvency going forward. Although fierce anger against the bailouts persists, there is little argument that this first stage was a success. However untidily the rescue was managed, the financial crisis is over.

In the second stage, Bernanke has sought to revive a weak economy by maintaining short-term interest rates at close to zero, and by purchasing, in vast quantities, long-term Treasury bonds and mortgage-backed securities. This second phase has been, if anything, more controversial than the first. Its success is much harder to measure (we have no way of knowing whether the economy's improvement would have been less robust, and how much so, without Bernanke's efforts). And it has exposed Bernanke to charges of meddling too deeply in the private sector, of disrupting the economy's natural rhythms long past the point when such intervention is necessary. In particular, critics note that the Fed has stuffed the banking system with $1.5 trillion in excess reserves—money for which the banks have no present use, loan demand being modest, but which could one day spark an epidemic of inflation.

THE U.S. FEDERAL RESERVE was founded 99 years ago, as a bulwark to the banking system and an antidote to its frequent runs and panics. Strictly speaking, it was America's third attempt at a central bank. The first, organized by Congress in 1791, was allowed to expire after 20 years, leaving the young republic with only a patchwork system of weaker state banks. During the War of 1812, Congress realized its error (in the absence of a central bank, inflation had run rampant), and in 1816, it chartered a second bank, again for 20 years. The Second Bank of the United States was, in the main, a success. Its notes were circulated as currency, and it astutely managed their supply so as to keep the economy humming. Alas, President Andrew Jackson, a fierce opponent of both paper money and national banks, campaigned in 1832 against renewal of the charter, and indirectly against the bank's brilliant but impetuous head, Nicholas Biddle. Resentment against financiers was running high, and the election became a referendum on the genteel Philadelphia banker versus the rough-hewn war hero—and a referendum on the bank itself. Jackson won, and the Second Bank was, per his promise, destroyed. The U.S. economy promptly plunged into a severe depression. Biddle died not long after, in semi-disgrace, but the battle between bankers and populists never went away.

None of the invective heaped, of late, on Ben Bernanke would have come as a surprise to Biddle, and one doubts whether the Fed would fare much better with the electorate today than the Second Bank did in the 19th century. Bernanke himself certainly would not win a popularity contest. In 2010, four years after his appointment by President George W. Bush as Fed chief, he was approved for a second term by a Senate vote of 70 to 30—the slimmest margin for a Fed chief ever. (In 2000, Alan Greenspan won a fourth term by a vote of 89 to 4.) Bernanke's troubles with politicians were a direct result of his sagging poll numbers, and since his reappointment these numbers have only gotten worse. In a Bloomberg poll last September, only 29 percent of respondents expressed a favorable opinion of Bernanke; 35 percent had an unfavorable view. In October, just 40 percent of those surveyed by Gallup said they had confidence in Bernanke's ideas for creating jobs; even congressional leaders inspired greater faith.

Over the past four and a half years, Bernanke, 58, has presided over the most sustained period of crisis of any civilian official in recent history, with the fate of millions of unemployed and underemployed Americans hanging in the balance. Only recently has the economy begun to show signs that the recovery is gaining steam. Since August 2007, Bernanke has deployed the Fed as the lender of last resort to the banking system and worked overtime to furnish an "elastic currency"—that is, to keep enough money in circulation for the economy to function. These were the very tasks that the founders of the Fed envisioned. Bernanke has performed them by tripling the size of the Fed's balance sheet—to an eye-popping $2.9 trillion—and by inventing a welter of new programs to lend to banks and other private-sector institutions. For most of the Fed's history, popular opinion—being generally opposed to depressions—has favored such efforts, but today the public's disgust with government, and with banks, has cast a shadow of suspicion upon Bernanke. Ron Paul touched a chord when he asked, in November 2010, how the Fed could create $600 billion "with the stroke of a pen." So did Michele Bachmann, grilling Bernanke at a congressional hearing a few months after the crash, when she queried, "Do you believe there are any limits on the authority that the Federal Reserve has taken since March 2008?"

Bernanke's unconventional programs have been implemented in two phases. During the financial crisis of 2007–09, he bailed out a handful of large banks and devised a series of innovative lending operations to disperse credit to banks, small businesses, and consumers (virtually all of these loans have been repaid at a profit to taxpayers). He also lowered short-term interest rates to nearly zero and made private banks run a gantlet of stress tests to ensure some minimal level of solvency going forward. Although fierce anger against the bailouts persists, there is little argument that this first stage was a success. However untidily the rescue was managed, the financial crisis is over.

In the second stage, Bernanke has sought to revive a weak economy by maintaining short-term interest rates at close to zero, and by purchasing, in vast quantities, long-term Treasury bonds and mortgage-backed securities. This second phase has been, if anything, more controversial than the first. Its success is much harder to measure (we have no way of knowing whether the economy's improvement would have been less robust, and how much so, without Bernanke's efforts). And it has exposed Bernanke to charges of meddling too deeply in the private sector, of disrupting the economy's natural rhythms long past the point when such intervention is necessary. In particular, critics note that the Fed has stuffed the banking system with $1.5 trillion in excess reserves—money for

which the banks have no present use, loan demand being modest, but which could one day spark an epidemic of inflation.

Michael Bordo, a monetary historian at Rutgers, told me that in this second phase, "Bernanke has moved into areas that were quite different from what the framers had in mind. One of the risks the Fed is facing is of overreach." Similar criticisms have been sounded, with notably less restraint, on the presidential campaign trail. Texas Governor Rick Perry said in August that Bernanke, who steered the economy out of its worst slump since the Great Depression, was "almost treacherous—or treasonous in my opinion." He also declared, famously, "If this guy prints more money between now and the election, I dunno what y'all would do to him in Iowa, but we would treat him pretty ugly down in Texas." Most of the other GOP candidates struggled to find a way to attack Bernanke without sounding like they were, just yet, rounding up a lynching party. Newt Gingrich called Bernanke "the most inflationary, dangerous" Fed chairman "in history"—a remarkable statement given that during Bernanke's tenure, inflation as measured by the Consumer Price Index has averaged 2.4 percent, lower than that under any other Fed chief since the Vietnam War. Mitt Romney, who had previously praised Bernanke for doing a good job, promised in September that if elected he would replace him, as did Herman Cain (Bernanke's term expires in 2014). Ron Paul, a proponent of returning to the gold standard, in November called the Fed, which has been off the gold standard since 1971, "immoral." In January, partly on the strength of his enmity toward the Fed, Paul finished a close third in the Iowa caucuses and second in the New Hampshire primary. "If the Fed had to be rechartered now, God help us," Alan Blinder, a Princeton scholar who was the Fed vice chairman in the 1990s, told me.

Though Bernanke is a Republican, Republicans in Congress have conducted a sustained war against him, threatening to audit the Fed's interest-rate moves; accusing Bernanke of cover-ups; refusing to fill two vacancies on the Fed's board of seven governors, the body that Bernanke chairs; and protesting his policy briefs on mortgage reform. Last September, when Bernanke was planning to launch his latest stratagem for spurring the economy, known as Operation Twist, the Republican House and Senate leadership publicly called on Bernanke to desist—a rare attempt by Congress to meddle directly in monetary policy. Bernanke defied them.

Anti-Fed populism is in no way limited to the red states. Driving near my home in suburban Boston—not exactly Tea Party territory—I saw a car sporting a Celtic-green bumper sticker bearing the title of Ron Paul's best-selling book End the Fed. More substantively, Bernanke has found himself in the crosshairs of a debate between the left and the right over whether he is doing too much or too little to stimulate the economy. All this, while the debt troubles in Europe have threatened to compound America's problems and snuff out the recovery before it takes hold.

At the core of the debate are concerns about the risks and costs of inflation, on the one hand, and worries about the pace and fragility of the recovery, on the other. In November 2010, when the Fed embarked on a second stage of "quantitative easing"—which entailed purchasing $600 billion in long-term Treasury bonds—Kevin Warsh, Bernanke's fellow Fed governor and a close colleague, wrote a *Wall Street Journal* op-ed questioning the operation and suggesting that Bernanke may have overstepped. (A few months later, Warsh resigned.) Even foreign central bankers—normally a diplomatic lot—piled on, attacking Bernanke for allegedly weakening the dollar and hurting their exports; the

German finance minister called the Fed chairman's policy "clueless." Then the strategy was condemned in a widely circulated open letter to Bernanke signed by 23 Republican-leaning financial experts. The letter, which demanded an immediate halt to the program, stated, "We disagree with the view that inflation needs to be pushed higher."

At the time, inflation was trending down toward 1 percent, worryingly close to the negative territory known as deflation. One reason the Great Depression lasted so long is that prices kept falling, year after year. A primary aim of Bernanke's new program was to ward off deflation, which it did. But this success has not been nearly enough to satisfy Bernanke's critics on the left—who have been pushing the Fed chief to initiate (within some limits) the very inflation that those on the right fear.

Paul Krugman, the *New York Times* columnist and Nobel-laureate economist, has been scathingly critical of Bernanke for, supposedly, restraining his naturally dovish instincts. (In Fed parlance, "hawks" want to tighten policy to prevent inflation; "doves" want to loosen it to increase demand.) Krugman, on his blog, has rebuked the Fed under Bernanke—the most activist Fed chief in history—for exhibiting "shameful" passivity, and has categorized his stewardship of the Fed as "Profiles in Fed Cowardice." It's worth noting that Krugman's academic career got a boost when Bernanke, over the objection of some faculty members, hired him at Princeton, where Bernanke was the chair of the economics department. Apparently, Bernanke's courage has since deserted him; Bernanke "wimps out," Krugman announced in an April 2011 blog post. The columnist has written that Bernanke surely agrees with his policy ideas, but has been "intimidated" by "inflationistas."

The blasting of Bernanke from both extremes is, to put it mildly, unprecedented. Then again, the stakes have seldom been so high. With Congress paralyzed on fiscal issues, Bernanke has more influence than anyone else over the economy. As Lawrence Katz, a prominent economist at Harvard, told me, "He is sort of the only game in town."

I MET WITH BERNANKE on the Tuesday after Thanksgiving—a day after he had completed a program of unconventional "swap" loans to Europe, when the Continent seemed on the verge of collapse—and again in December. I had first met him in 2007, before the financial crisis, and gathered at the time that he paid more attention to critiques from fellow academics than from the press. But because his policy depends on communicating his goals to the public, popular criticism has come to threaten his effectiveness—or so Bernanke fears. In our recent meetings, he was more assertive than I remembered, a trifle defiant. When I saw him in November, he was conservatively dressed in a dark suit brightened by a purple tie. He ushered me into his office, next door to the Fed's chandeliered boardroom, and toward a dark-leather couch and chairs by a walnut coffee table. His office looked not a trace different from four years earlier; the same photograph of the original Federal Reserve Board was framed above his neatly ordered desk, as though he hadn't had time to look up since. The crisis did not seem to have aged him, although the criticism he has endured was clearly weighing on him. Soon after my visit, he released a letter he had written to Senate leaders refuting, point by point, a spate of articles that had characterized a Fed lending program as "secret" (the names of the borrowers were secret, but not the existence of the program or its size), and that had reported the total of Fed loans and bailouts as $7.7 trillion, a wild exaggeration.

Bernanke is bothered by attacks that seem to be little more than smears; conversely, he is buoyed when strangers stop him in airports to offer an encouraging word. Rising

to his own defense, he told me, “I would argue that everything we have done has been in the interest of the American public and, broadly, of the global economy. A lot of people get that.” (Privately, Bernanke and Timothy Geithner, the treasury secretary, have shared mutual wonder that the financial rescue, which they consider a success, has been so widely panned. Geithner told me that recently, when he informed Bernanke that yet another officeholder had asked for each of their resignations, Bernanke wryly quipped, “Well, that’s a step up from being accused of treason.”)

As we began to discuss his policies, the Fed chief urged me to pick up a copy of Lombard Street, a seminal book on central banking written by Walter Bagehot, the 19th-century British essayist. “It’s beautiful,” Bernanke said of the book—obviously appreciating that Bagehot had urged central bankers to take vigorous action to forestall panics. (The Bank of England, Bagehot writes, should “lend in times of internal panic as freely and readily, as plain principles of banking require.”) Segueing to the reaction to his own crisis measures, Bernanke told me, “Some people don’t understand—fulfilling the responsibility as lender of last resort is what the Fed was created to do. This is what central banks have been doing for 300 years.”

Bernanke has a sense of history uncommon among public officials. He insists that overall, his efforts have hewed to the Fed’s mission—to *furnish an elastic currency* appears in the preamble to the Federal Reserve Act of 1913—and that his improvisations have been forced on him by the extraordinary, and perilous, position of the U.S. economy. He has gone to unprecedented lengths—press conferences, town-hall meetings, appearances on *60 Minutes*—to communicate those ideas to the public. According to Greg Mankiw, formerly President George W. Bush’s top economist and now an adviser to Mitt Romney, Bernanke earnestly believes in the democratic process; he thinks disclosure will lead to a more responsible electorate. Perhaps this is why the public vitriol so disturbs him. Bernanke himself eschews hyperbole (he chooses his words with meticulous care) and refrains from personalizing policy differences. In December, he felt compelled to release a letter to Senate leaders in which he distinguished Federal Reserve loans, which have not cost the taxpayers anything or added to the federal deficit, from “government spending”—a simple point, perhaps, but one that is often confused in the public discourse.michael Bordo, a monetary historian at Rutgers, told me that in this second phase, “Bernanke has moved into areas that were quite different from what the framers had in mind. One of the risks the Fed is facing is of overreach.” Similar criticisms have been sounded, with notably less restraint, on the presidential campaign trail. Texas Governor Rick Perry said in August that Bernanke, who steered the economy out of its worst slump since the Great Depression, was “almost treacherous—or treasonous in my opinion.” He also declared, famously, “If this guy prints more money between now and the election, I dunno what y’all would do to him in Iowa, but we would treat him pretty ugly down in Texas.” Most of the other GOP candidates struggled to find a way to attack Bernanke without sounding like they were, just yet, rounding up a lynching party. Newt Gingrich called Bernanke “the most inflationary, dangerous” Fed chairman “in history”—a remarkable statement given that during Bernanke’s tenure, inflation as measured by the Consumer Price Index has averaged 2.4 percent, lower than that under any other Fed chief since the Vietnam War. Mitt Romney, who had previously praised Bernanke for doing a good job, promised in September that if elected he would replace him, as did Herman Cain (Bernanke’s term expires in 2014). Ron Paul, a proponent of

returning to the gold standard, in November called the Fed, which has been off the gold standard since 1971, "immoral." In January, partly on the strength of his enmity toward the Fed, Paul finished a close third in the Iowa caucuses and second in the New Hampshire primary. "If the Fed had to be rechartered now, God help us," Alan Blinder, a Princeton scholar who was the Fed vice chairman in the 1990s, told me.

Though Bernanke is a Republican, Republicans in Congress have conducted a sustained war against him, threatening to audit the Fed's interest-rate moves; accusing Bernanke of cover-ups; refusing to fill two vacancies on the Fed's board of seven governors, the body that Bernanke chairs; and protesting his policy briefs on mortgage reform. Last September, when Bernanke was planning to launch his latest stratagem for spurring the economy, known as Operation Twist, the Republican House and Senate leadership publicly called on Bernanke to desist—a rare attempt by Congress to meddle directly in monetary policy. Bernanke defied them.

Anti-Fed populism is in no way limited to the red states. Driving near my home in suburban Boston—not exactly Tea Party territory—I saw a car sporting a Celtic-green bumper sticker bearing the title of Ron Paul's best-selling book End the Fed. More substantively, Bernanke has found himself in the crosshairs of a debate between the left and the right over whether he is doing too much or too little to stimulate the economy. All this, while the debt troubles in Europe have threatened to compound America's problems and snuff out the recovery before it takes hold.

At the core of the debate are concerns about the risks and costs of inflation, on the one hand, and worries about the pace and fragility of the recovery, on the other. In November 2010, when the Fed embarked on a second stage of "quantitative easing"—which entailed purchasing $600 billion in long-term Treasury bonds—Kevin Warsh, Bernanke's fellow Fed governor and a close colleague, wrote a *Wall Street Journal* op-ed questioning the operation and suggesting that Bernanke may have overstepped. (A few months later, Warsh resigned.) Even foreign central bankers—normally a diplomatic lot—piled on, attacking Bernanke for allegedly weakening the dollar and hurting their exports; the German finance minister called the Fed chairman's policy "clueless." Then the strategy was condemned in a widely circulated open letter to Bernanke signed by 23 Republican-leaning financial experts. The letter, which demanded an immediate halt to the program, stated, "We disagree with the view that inflation needs to be pushed higher."

At the time, inflation was trending down toward 1 percent, worryingly close to the negative territory known as deflation. One reason the Great Depression lasted so long is that prices kept falling, year after year. A primary aim of Bernanke's new program was to ward off deflation, which it did. But this success has not been nearly enough to satisfy Bernanke's critics on the left—who have been pushing the Fed chief to initiate (within some limits) the very inflation that those on the right fear.

Paul Krugman, the New York Times columnist and Nobel-laureate economist, has been scathingly critical of Bernanke for, supposedly, restraining his naturally dovish instincts. (In Fed parlance, "hawks" want to tighten policy to prevent inflation; "doves" want to loosen it to increase demand.) Krugman, on his blog, has rebuked the Fed under Bernanke—the most activist Fed chief in history—for exhibiting "shameful" passivity, and has categorized his stewardship of the Fed as "Profiles in Fed Cowardice." It's worth noting that Krugman's academic career got a boost when Bernanke, over the objection of some faculty members, hired him at Princeton, where Bernanke was the chair of the eco-

nomics department. Apparently, Bernanke's courage has since deserted him; Bernanke "wimps out," Krugman announced in an April 2011 blog post. The columnist has written that Bernanke surely agrees with his policy ideas, but has been "intimidated" by "inflationistas."

The blasting of Bernanke from both extremes is, to put it mildly, unprecedented. Then again, the stakes have seldom been so high. With Congress paralyzed on fiscal issues, Bernanke has more influence than anyone else over the economy. As Lawrence Katz, a prominent economist at Harvard, told me, "He is sort of the only game in town."

I MET WITH BERNANKE on the Tuesday after Thanksgiving—a day after he had completed a program of unconventional "swap" loans to Europe, when the Continent seemed on the verge of collapse—and again in December. I had first met him in 2007, before the financial crisis, and gathered at the time that he paid more attention to critiques from fellow academics than from the press. But because his policy depends on communicating his goals to the public, popular criticism has come to threaten his effectiveness—or so Bernanke fears. In our recent meetings, he was more assertive than I remembered, a trifle defiant. When I saw him in November, he was conservatively dressed in a dark suit brightened by a purple tie. He ushered me into his office, next door to the Fed's chandeliered boardroom, and toward a dark-leather couch and chairs by a walnut coffee table. His office looked not a trace different from four years earlier; the same photograph of the original Federal Reserve Board was framed above his neatly ordered desk, as though he hadn't had time to look up since. The crisis did not seem to have aged him, although the criticism he has endured was clearly weighing on him. Soon after my visit, he released a letter he had written to Senate leaders refuting, point by point, a spate of articles that had characterized a Fed lending program as "secret" (the names of the borrowers were secret, but not the existence of the program or its size), and that had reported the total of Fed loans and bailouts as $7.7 trillion, a wild exaggeration.

Bernanke is bothered by attacks that seem to be little more than smears; conversely, he is buoyed when strangers stop him in airports to offer an encouraging word. Rising to his own defense, he told me, "I would argue that everything we have done has been in the interest of the American public and, broadly, of the global economy. A lot of people get that." (Privately, Bernanke and Timothy Geithner, the treasury secretary, have shared mutual wonder that the financial rescue, which they consider a success, has been so widely panned. Geithner told me that recently, when he informed Bernanke that yet another officeholder had asked for each of their resignations, Bernanke wryly quipped, "Well, that's a step up from being accused of treason.")

As we began to discuss his policies, the Fed chief urged me to pick up a copy of Lombard Street, a seminal book on central banking written by Walter Bagehot, the 19th-century British essayist. "It's beautiful," Bernanke said of the book—obviously appreciating that Bagehot had urged central bankers to take vigorous action to forestall panics. (The Bank of England, Bagehot writes, should "lend in times of internal panic as freely and readily, as plain principles of banking require.") Segueing to the reaction to his own crisis measures, Bernanke told me, "Some people don't understand—fulfilling the responsibility as lender of last resort is what the Fed was created to do. This is what central banks have been doing for 300 years."

Bernanke has a sense of history uncommon among public officials. He insists that overall, his efforts have hewed to the Fed's mission—to furnish an elastic currency ap-

pears in the preamble to the Federal Reserve Act of 1913—and that his improvisations have been forced on him by the extraordinary, and perilous, position of the U.S. economy. He has gone to unprecedented lengths—press conferences, town-hall meetings, appearances on 60Minutes—to communicate those ideas to the public. According to Greg Mankiw, formerly President George W. Bush's top economist and now an adviser to Mitt Romney, Bernanke earnestly believes in the democratic process; he thinks disclosure will lead to a more responsible electorate. Perhaps this is why the public vitriol so disturbs him. Bernanke himself eschews hyperbole (he chooses his words with meticulous care) and refrains from personalizing policy differences. In December, he felt compelled to release a letter to Senate leaders in which he distinguished Federal Reserve loans, which have not cost the taxpayers anything or added to the federal deficit, from "government spending"—a simple point, perhaps, but one that is often confused in the public discourse.

IN 1931, MONTAGU NORMAN, the governor of the Bank of England, collapsed from the emotional strain of trying to combat the Great Depression: the pressure endured by central bankers during crises is intense. But when you ask colleagues to describe Bernanke, they inevitably start by citing his preternatural calm. He was so composed during the financial crisis that Donald Kohn, then his vice chairman, wondered if Bernanke was making a conscious effort to check his emotions. He "is absolutely amazing under pressure," according to Olivier Blanchard, the chief economist at the International Monetary Fund.

The chairman's manner is perfectly suited to the seminar halls where he has spent half his life: careful, deliberate, soft-spoken. Fed staffers frequently cite his humility and willingness to hear all views. This has its downside. Bernanke has been an ineffective lobbyist for agendas beyond the Fed's purview, such as long-term deficit reduction or mortgage reform. Nor has he exploited the natural leadership role of the Fed chairman on the world stage, for instance during the crisis in Europe. When Alan Greenspan showed up at international meetings, he got star treatment. Bernanke, says one former White House official, is just "another guy at the table." This is pretty much who Bernanke is. He reasons; he doesn't thunder.

But his restrained manner belies a forcefulness and a willingness to take political heat. Early in 2008, the Fed was mulling a small interest-rate cut to ease the escalating mortgage crisis; cutting rates was controversial because hawkish economists, of whom there were many, feared inflation. Bernanke decided to cut rates by three-quarters of a point—a very big move. As he told a colleague, he was going to be pilloried for whatever he did, so there was no sense holding back. Months later, when he was trying to persuade a reluctant Congress to pass the Troubled Asset Relief Program, which Bernanke said was necessary to arrest a steep recession that would otherwise cripple Main Street, some members of Congress told him they didn't see any evidence of a downturn in their districts. The chairman calmly replied, "You will."

Bernanke rarely socializes with Washington luminaries; he is close to Geithner, whom he sees for breakfast or lunch nearly every week, but theirs is a business relationship. Very occasionally, Bernanke goes to a Nationals game or escorts his wife, Anna, a schoolteacher, to the Kennedy Center. In four years, his only vacations have been trips to see his elderly parents and other family members in North Carolina. He works every day (including this past Thanksgiving, when he was orchestrating the swap loans to Europe) and spends

weekend mornings at the office.

Mankiw says there is a bizarre disconnect between the chairman's reputation among experts, who mostly respect him, and the public's disapproval. Professional colleagues speak of his courage and resourcefulness. Larry Summers, formerly President Obama's economic adviser, who is known for his caustic tongue, told me that among Washington insiders, "I don't think anyone dislikes him." Even some of his critics, on closer inspection, are not so critical. Kevin Hassett, a conservative economist who helped organize the November 2010 open letter against quantitative easing, told me that while he disagrees with Bernanke about that easing program, overall, "I don't see how anyone could do a better job." Sounding embarrassed about the attacks by some Republicans, Hassett added, "I don't see how you can hate him."

BEN SHALOM BERNANKE was raised a druggist's son in Dillon, South Carolina, a city (today) of 6,800. He studied the Depression as a graduate student at MIT, and as a young academic earned his reputation by expanding on Milton Friedman's classic monetary history. According to Friedman, the Fed's failure in the 1930s was a matter of not printing enough money. Bernanke deduced that the real failure was letting the banking system implode. "What Bernanke discovered was that it wasn't the quantity of money, it was that the banks stopped lending," says Stanley Fischer, formerly Bernanke's thesis adviser at MIT and currently the governor of the Bank of Israel. "More than the decline in money, it was the collapse of credit." The implication was that regulating banks in good times—and, if need be, rescuing them in bad—was of prime importance, something Bernanke would remember in the 2007–09 crisis.

At Princeton, Bernanke became the country's preeminent monetary scholar. He first joined the Fed, as a governor, in 2002, and even then, the Depression remained, for him, a very live precedent. Months into his term as a governor, he gave a speech at the National Economists Club on the potential for a 1930s-style collapse. The particular problem of the '30s was deflation: goods were worth less each year—or, alternatively, dollars were worth more. In a mirror image of inflation, no one would spend, because lower prices were forever just around the corner, and no one would borrow, because they would have to repay their debts with *more valuable* currency. The central bank cut interest rates to try to induce borrowing and spending, but then it was bereft of tried-and-true methods of stimulating the economy. Production and employment kept spiraling downward; Keynes called this a "liquidity trap."

In 2002, in his talk to the National Economists Club, when the economy was bottoming out from the dot-com crash, Bernanke discussed the potential for a renewed cycle of deflation and severe recession. Although deflation should be avoided altogether, he said, if it took hold, the Federal Reserve would not be powerless to combat it. He described potential remedies, such as buying long-term bonds and government-agency mortgage-backed securities. And if all else failed, the Fed could still stimulate spending, he argued, by resorting to Milton Friedman's famous "helicopter drop." (Friedman facetiously suggested dropping bills from the sky, which the Fed could achieve in actuality, Bernanke said, by printing the money to pay for a tax cut.) Bernanke returned to this theme in two speeches in 2003. Plainly, deflation and crashes were on his mind.

But while Bernanke recognized the danger in theory, he did not anticipate the looming crash in home prices. Indeed, he argued that central banks, including the Fed, had tamed the extremes of the economic cycle. In 2005, in a speech in St. Louis, he cogently

explained how capital from China and other countries was flowing into the U.S. mortgage market and spurring higher prices in residential real estate. He did not express concern. The following year, as the housing bubble reached its peak, he became Fed chairman.

In 2007, as the subprime-mortgage crisis leached into the financial markets, Bernanke's training failed him. As a scholar, he had studied how bank failures worsened the Depression; as the Fed chair, he didn't scrutinize the banks closely enough—that is, he overlooked the fact that dicey mortgage-backed securities made up a sizable portion of the assets of the biggest banks. "Risk was concentrated in key financial intermediaries," he told me. "It led to panics and runs. That's what made it all so bad." Speaking of government officials collectively, he added, "Everyone failed to appreciate that our sophisticated, hypermodern, highly hedged, derivatives-based financial system—how ultimately fragile it really was."

There was, I think, another reason for his blindness: Bernanke had an academic's faith in the market's essential rightness. He was so skeptical of the notion of mass-market folly that in his scholarly writings, he referred to bubbles in quotation marks. He was not, like Greenspan, ideologically opposed to government intervention, but he was dubious that anyone could identify, in real time, when markets were off course.

These criticisms aside, if one is assigning blame, it is important to note that the bubble inflated almost entirely on Greenspan's watch. The time to avoid a crash was when mortgages were getting written, or when banks could still sell off assets without sparking a panic; by the time Bernanke arrived, a crisis was probably inevitable. In any case, by 2008, Bernanke was confronting the very type of banking meltdown he had spent his academic life studying. No one was better suited to the job; indeed, the Fed adopted the remedies Bernanke had outlined in his 2002 address nearly point for point.

In our meetings, Bernanke defended the bank bailouts as necessary, but he expressed supreme distaste for them—"That must never happen again," he cut in when I mentioned AIG, the insurance giant whose reckless behavior he has often criticized. Under the Federal Reserve Act, the Fed is authorized to make loans under "unusual and exigent circumstances" as long as the loans are "secured to the satisfaction of the Federal Reserve banks," meaning, as long as the Fed does not expect to suffer any losses. A fair argument can be made that in the depths of the crisis, some of the Fed's emergency loans violated this dictum. The very solvency of institutions such as AIG and Bank of America was in doubt. But then, the solvency of a bank could itself depend on the willingness of the Fed to intervene. Brian Madigan, a former senior official at the Fed, made just that argument after the crisis, and also wrote that Bagehot's principles "need to be interpreted and applied in the real world." One senses that he was speaking for the chairman. With the financial system on the brink of collapse, bailouts were deemed to be the lesser of two evils.

EVEN RIGHTWARD-LEANING ECONOMISTS mostly give Bernanke a pass on his actions during the financial panic itself. The fog of war was pretty intense, and he avoided losing taxpayer money. But in the second stage—resurrecting the economy, and potentially tinkering with the inflation rate—he has taken heat from thinkers on both sides of the aisle. Even the Fed's Open Market Committee, the group that sets interest-rate policy, is splintered. In the Greenspan era, especially as the chairman's aura grew, this body spoke with one voice, rubber-stamping whatever the chairman wanted. Bernanke's committee is a monetary Babel—partly because he is open to hearing contrary opinions,

and partly because opinion is so deeply divided. While Greenspan withstood a dissenting vote here or there, Bernanke has suffered 32 nay votes, including three dissents in a single meeting. That hadn't happened in 20 years.

Most of Bernanke's dissenters are hawks, but Charles Evans, president of the Federal Reserve Bank of Chicago, has dissented twice because he thinks the Fed should be willing to tolerate a higher rate of inflation until the job market recovers. Janet Yellen, the Fed's vice chair, and William Dudley, president of the New York Fed, also lean toward increased stimulus. No previous Fed chief had to deal with such an internal crossfire.

Bernanke's quandary derives from the fact, unusual among the world's central banks, that the Fed has a "dual mandate"—by law, it is required to promote "maximum employment" and also "stable prices." The European Central Bank, by contrast, is supposed to worry only about inflation. This is why the latter twice raised interest rates in 2011, when Europe was teetering at the edge of recession and possibly default.

The formative experience for the European Central Bank was the hyperinflation in Germany in the 1920s, which ever since has steeled central bankers on the Continent against the perils of printing money. In Frankfurt, the idea of "lender of last resort" wasn't, and isn't, embraced. For the U.S. Federal Reserve, the formative experience was a series of depressions beginning in the 19th century and culminating in the Great Depression. After the demise of Biddle's bank in the 1830s, "money" in the U.S. consisted of whatever notes banks printed and people agreed to take. Even after the Civil War, when "money" became more uniform, currency was often a scarce commodity, and banking panics were frequent.

The Fed was conceived, in 1913, as a backstop to the financial system. "Printing money"—the accusation that Rick Perry leveled against Bernanke—was part of the job description from the outset. Currency still consisted of banknotes, only now the bank was the Federal Reserve. The Fed seemed to fulfill its promise during World War I, pumping hundreds of millions of emergency dollars into the financial system. During the Depression, for reasons that are still being debated, it failed. Bernanke clearly has avoided the worst mistakes central banks made in the Depression. Yet unemployment remains high, raising questions from some economists, especially on the left, as to whether the Fed has done enough.

Bernanke, for the most part, has kept inflation in the range of 2 percent a year, which is where he wants it—not so high that it would threaten an inflationary spiral, but high enough to provide a cushion so that policy makers can react if inflation shows signs of ebbing and deflation looms. Krugman and others argue that the Fed should encourage faster inflation to address persistent high unemployment. This argument operates on several levels. Printing money, of course, does not create jobs. But because wages are "sticky," higher prices for goods can make labor more affordable to employers. When times are tough, McDonald's, for example, has no qualms about cutting hamburger prices, but it is less likely to cut pay. Instead, it employs fewer workers. (This is why the economy lost 8.5 million jobs during the recession; there is a very strong social bias against asking workers to go "on sale.") Inflation is a less visible way of reducing pay. Workers think they are making the same amount, but since the dollars are worth less, employers can better afford to pay them.

The second way in which inflation could help the economy is that it makes borrowing and spending more attractive (debtors can repay their loans in cheaper dollars). For the

same reason, inflation is a boon to people *already* in debt—people with mortgages, for instance. By hastening the "deleveraging" of American households, the argument goes, inflation could unlock the housing market and also return us more quickly to more-normal spending and employment patterns. Kenneth Rogoff, a Harvard economist who once worked at the Fed, has suggested that Bernanke try to raise inflation into a range between 4 and 6 percent.

There are very good reasons to be wary of such a prescription. Just as inflation helps debtors, it hurts creditors. Banks and bondholders get cheated, because their loans are repaid with inflated coin. Similarly, people with fixed savings, such as retirees, get punished for their thrift. President Grover Cleveland, a warrior against inflation (in his day, brought about by cheap silver), rightly likened a debasement of the currency to theft. Of course, someone also benefits from this theft—in Cleveland's era, farmers seeking higher prices; in ours, the unemployed. The latter are hardly to be blamed for being jobless, but helping them involves a trade-off that creates losers as well as winners. And the trade-off is only temporary. Eventually, wages catch up with money creation. Once the economy is operating at its potential, dropping money from the sky will not add jobs. It will keep causing inflation.

Bernanke has given serious thought to the Krugman-Rogoff argument. One obstacle is practical. Fed policy works, in part, by getting the market to do the Fed's work (if the Fed is buying bonds, traders who want to be on the same side of the markets as the central bank will buy bonds too). But any policy adopted by less than a 7-to-3 majority by the Fed's Open Market Committee would not be viewed by markets as a credible policy, likely to endure, and Bernanke is not guaranteed to get this margin today. "No central banker would do it," Mankiw says of raising the inflation target; the political reaction would be too severe. (When Mankiw, a Harvard economist, wrote a column raising the possibility of a higher inflation target, Drew Faust, the university's president, received letters urging her to fire him.)

This might seem to support Krugman's thesis that Bernanke would like to boost inflation but has chickened out. But after talking with the chairman at length (he was generally not willing to be quoted on this issue), I think that, although Bernanke appreciates the intellectual argument in favor of raising inflation, he finds more compelling reasons for not doing so. First is the fear that inflation, once raised, could not be contained. The Fed creates inflation by adding reserves to the banking system (falling interest rates are the market's way of registering the increasing plenitude of money). If so much money enters the system that wages and prices start ratcheting upward, the momentum can be self-perpetuating. "The notion that we can antiseptically raise the target and control it is highly questionable," Bernanke told me.

Second, raising inflation is not always so *easy*. Inflation does not go up by fiat—by edict of the central bank. Rather, the Fed has to persuade millions of people to spend more money and tens of thousands of businesses to raise their prices. And this will not happen if people think the monetary easing is temporary. Money comes from credit, and borrowing depends on expectations for the future. The theoretical point is that the market sets long-term interest rates to reflect the sum of expected future short-term rates. So the way to reduce long-term rates is to convince people that short-term rates (which the Fed controls) will stay low for an indefinite period. As Bernanke is well aware, this problem has generated an extensive literature, the gist of which is that the Fed would

have to promise to be, in effect, "irresponsible." In other words, the Fed would have to say, "Even when prices start rising, even when inflation starts to get out of hand, we will still keep rates near zero." That is what sparked the inflation of the '70s: people thought inflation was permanent, and a borrow-and-spend mentality set in. If Bernanke were to re-create that climate, it would be hard to shut down.

MY SENSE IS that Bernanke is too much a sober central banker to want to risk the Fed's credibility on inflation. His view represents a serious break from many of his fellow academics because, according to the world as left-leaning scholars depict it, raising inflation is the only thing that will work when the economy has hit dead air. Bernanke thinks he has other tools. One, of course, is quantitative easing. Instead of lowering expectations for short-term rates, which is how the Fed usually operates, quantitative easing involves *direct* intervention in the long-term sector of the credit market. By purchasing long-term securities, the Fed aims to reduce the cost of mortgages, corporate debt, and so forth. Working on long-term interest rates is a natural move, because short-term rates are already near zero. But whether quantitative easing has much impact is hotly debated. The policy was clearly effective during the early stages of the mortgage crisis, when it helped to unfreeze credit markets, enabling companies and individuals to get loans again. However, even Bernanke's supporters admit that since these markets have begun functioning again, continued purchases of long-term bonds have had only a modest effect. Mark Gertler, an economist at New York University and a friend of Bernanke's, says the second round of quantitative easing might have moved the needle by perhaps a quarter of a percentage point. He nonetheless credits this policy with keeping inflation from sagging dangerously low—"not a trivial accomplishment." The Fed also seems to have accelerated last year's spike in the price of gold, oil, and other commodities. And that, to conservatives, is just the problem.

The critique from the right is that the continued steps to stimulate the economy are both unnecessary, given that the financial crisis has passed, and inflationary. Allan Meltzer, an economist and historian of the Fed, says Bernanke is trying to do what is beyond his powers. "The current high unemployment is not a monetary problem," Meltzer says, meaning we are past the point where further rate cuts will stimulate hiring. Bernanke has been accused of trying too many remedies with poor odds of success. Possibly, he would plead guilty to this. He has said he admires Franklin Roosevelt's catchall approach to fighting the Depression, which was less an ideology than an enthusiasm for enthusiasms. The fear now is that the Fed's balance sheet—that $2.9 trillion—represents kindling for inflation that one day will catch.

The mechanism for ignition would be as follows: Each time the Fed purchases a Treasury security or a mortgage-backed bond, it credits the selling bank with a "reserve" in the same dollar amount. Bank reserves exist as electronic notations, but they represent real money available for loans, and much of that money is sitting idle today, partly because loan demand is weak. If banks, presently, were to lend all their excess reserves, say in the form of cash, the supply of currency would nearly triple overnight, and the price of a burger would, you can bet, do the same. And if the Fed were faced with such an onslaught, and chose to soak up the excess reserves by quickly selling its assets, the deluge would overwhelm markets, send interest rates soaring, and snuff out the recovery.

Bernanke has thought about this—in fact, he has been thinking about how to exit from quantitative easing almost from the day he began it. In 2008, he asked for and

received expedited authority from Congress to pay interest to banks on their reserves. Currently, the rate is 0.25 percent. But let's say loan demand picks up (as has recently been the case, albeit slowly)—and therefore banks can profitably lend at a higher rate. The Fed will be free to raise its interest rate, tempering the rate of new lending by inducing the banks to keep some of their reserves parked—happily and idly—at the Fed. In plain English, Bernanke plans to reward the banks for keeping some of their money inert, which will give him time to unwind the balance sheet gradually. No one knows whether this gamble will work.

Still, the Fed has always faced the challenge of tightening credit after a period of ease. The fact that it has been accumulating long-term bonds rather than short-term bills is a relatively benign innovation, less exotic than many observers have claimed. So far, the hawks have seen inflation around every corner. So far, they have been wrong, and Bernanke has been right. The reasons critics so hate quantitative easing, I think, have less to do with the mechanics of bank reserves and more with nostalgia for a more cautious, and more tradition-bound, Federal Reserve. Quantitative easing's critics want the Fed to be leaner and less activist. They want consumers to reduce their debts, not to borrow and spend anew, and they fear that quantitative easing will create a new consumption bubble. Bernanke, in fact, has been facile on this point; he told Congress in February, "Our nation's tax and spending policies should increase incentives to work and save," but his nearly zero percent interest rate clearly discourages saving.

The Fed's purchases of mortgage-backed securities are controversial for a different reason. Critics charge that they are outside the Fed's charter. Bernanke hopes such purchases will lower mortgage rates, revive housing, and create jobs in construction. But any government investment that favors the housing industry necessarily disfavors aerospace, retail, and everything else that is not housing. Jeffrey Lacker, the hawkish president of the Federal Reserve Bank of Richmond, says this is credit allocation, not monetary policy. The Fed, he fears, is too much in agreement with the executive branch; elected politicians can throw the kitchen sink at mortgages, but neutral, unelected central bankers should not. And Warsh, the former Fed governor, who was a vigorous, if disputatious, ally of Bernanke's during the crisis, says the Fed should not be a "repair shop" for a broken fiscal policy, an auxiliary arm of a dysfunctional Congress. Warsh told me that the Fed's continued interventions have fogged up the dashboard and blurred the signals of the private sector. "We have been trying to fake a housing recovery for four and a half years," he says, meaning that each Fed purchase elevates the market above its inherent level.

By this thinking, bankruptcies and foreclosures play a restorative role—returning assets to the market newly unleveraged and reasonably priced. The argument has emotional—almost religious—appeal, the downward repricing of assets being the market's form of atoning for sin. Bernanke encountered this idea in November, when he visited military families at Fort Bliss, in El Paso. A woman asked him whether "we should be looking to get ourselves back to where we were … when it comes to how people live, buy homes, save, invest." The chairman drew a breath and acknowledged, "That's a very deep question." His answer was revealing. While insisting he has no wish to return to overpriced homes and lax mortgage standards, he added, "I'm not a believer in the Old Testament theory of business cycles. I think that if we can help people, we need to help people."

I pushed him, in one of our interviews, to elaborate, and he said, "There is a thesis that the only way to restore the economy is by a necessary purging of previous excesses.

In disagreeing, I am not saying there are not imbalances that need to be fixed. That said, there is still scope for policy to ameliorate the effects of necessary rebalancing on the public, to help shorten the recession. A massive decline in employment slows the rebalancing and deleveraging processes rather than speeds them; people don't have the income to pay their debts. So the argument is: where you can, you try to short-circuit the process by urging banks to take losses and modifications, and recapitalize. Obviously, you need to get bank balance sheets healthy, and individual consumers healthy—but subjecting the system to high unemployment and high rates of bankruptcy and foreclosure is a very inefficient way to get there."

Bernanke is more conservative than his Republican critics imagine, but as he has stated publicly, he finds the prospect of millions remaining unemployed "unacceptable." He is particularly worried about the many people who have been out of work for more than six months. Like FDR, he is willing to try what works, or what might work, and this puts him at odds with the economic originalists. He sees no evidence of inflation, but he does see economic distress, and so the latter is a greater concern. Though he recognizes the potential for inflation, he told 60 Minutes in December 2010 that he was "100 percent" certain of his ability to control it (a surprising, and troubling, certitude for a normally humble banker). When I brought up the argument that the purchase of mortgage-backed assets—inflationary impact aside—amounts to inappropriate "credit allocation," Bernanke gave a tired frown, as if the fine points of monetary theory cannot hold water against the concrete fact of unemployment. "I would argue the mortgage-backed securities we purchased probably moved the market closer to an efficient state rather than away from it," he told me.

APART FROM HIS direct interventions in the market, Bernanke is also doing more to communicate the Fed's intention to keep rates low, and publicizing the circumstances that would cause the Fed to start raising rates. Late last year, the Fed committee that sets overnight short-term interest rates took a small step by announcing that it will make public not just the current rate, but its members' future *expectations* for this rate. Then in January, fretting over the drag on the economy stemming from Europe, even as green shoots were sprouting in America, the committee took a big step. Although it had previously predicted that rates would stay near zero through the middle of 2013, now it forecast that rates would remain very low all the way through the end of 2014. Significantly, Bernanke said he could live with inflation's moving a bit higher for a while if that would help bring unemployment down. "We're not absolutist," he said in a news conference, sounding every bit a Rooseveltian. The following week, when Bernanke testified on Capitol Hill, Paul Ryan, the House Budget Committee chairman, pressed Bernanke: "It seems as if you're moving away from an inflation target … that the Fed is willing to accept higher levels of inflation in order to chase your employment mandate." Bernanke denied this. Two percent was still the target, he said, but it's the target *over the medium term*. "Monetary policy," he noted, "works with a lag. We can't achieve it every day, every week, but over a period of time we want to move inflation always back towards 2 percent. We will not actively seek to raise inflation." No Fed chief had ever been so explicit about his inflation target before.

Bernanke's emphasis on transparency rests on the notion, dear to modern financial economists, that people rationally adjust their behavior in line with expectations; thus, the Fed's predicting a market outcome can help make it so. That may be partly true,

though the theory is far from perfect. First, people do not always respond rationally to information. Second, the Fed has been poor at forecasting the state of the economy, so the public might just disregard its predictions and the policy expectations that result from them. Bernanke's January forecast that the economy will remain weak, and need prolonged resuscitation, could be off base. Even if he has lately developed clairvoyance, his term expires in January 2014; the market is unlikely to credit his power to forecast policy for the year after he leaves office. (It remains possible that President Obama, if reelected, would reappoint Bernanke to a third term.)

The Fed, in January, also said it will consider resuming bond purchases if the recovery loses steam. That prospect will be a subject of intense speculation among the monetary cognoscenti, but it must be admitted that in general, each round of quantitative easing has had diminishing returns. A next round, if it occurs, is likely to have less impact still. In short, even the imaginative and innovative Bernanke is close to having exhausted his options. Credit is flowing; short- and long-term money is cheap; and the economy is improving. The IMF's Blanchard, who studied with Bernanke at MIT, recently told me, "I think he has done what he can do. One has to accept that 'not enough' is enough."

Bernanke's conception of the central banker's job, Blanchard pointed out, has been fuller, more comprehensive, than that of their fellow bankers in Europe. Indeed, the European Central Bank has lately begun to mimic the Fed's approach to its own crisis. By mid-winter, U.S. unemployment had fallen to its lowest level since the end of the recession. Almost certainly, Bernanke will leave office with the United States in better shape than the Continent.

Ultimately, Bernanke's legacy will depend on whether he can fully exit from the mortgage debacle without bequeathing a new one, or lighting an inflationary fire that becomes uncontainable. Alan Greenspan retired as the prince of central banking, but saw his reputation wither because of the bubble that burst on Bernanke's watch. In office, Paul Volcker was highly controversial because of his hawkish policies; today he is practically canonized. Vincent Reinhart, who served under both Greenspan and Bernanke as the senior monetary deputy and is now retired, told me I was writing about Bernanke "five years too early." For sure, no one knows where either inflation or unemployment will be in five years' time. Forgoing a guess, I would offer the appraisal by Hank Paulson, the former treasury secretary, who told me recently: "I don't know what people expect Ben to do. To me, it's pretty amazing. Who would have guessed when he came to Washington we would be so fortunate to get someone who was willing to think outside the box and deal with this unprecedented crisis?"

The visceral criticism of Bernanke is hard to fathom, but it is in part the flip side of the enormous trust that we are asked to place in the modern Federal Reserve. At least in the time of Nicholas Biddle, and even during the formative years of the Fed, banknotes, being liabilities, could be redeemed for something of value, usually gold. Now our dollars are exchangeable only for more dollars. This is what alarms the originalists. As the publisher, Bernanke critic, and gold bug par excellence James Grant eloquently put it, "We have exchanged the gold standard for the Ph.D. standard, for soft central planning."

Originalists who are unhappy with quantitative easing are unhappy with elastic currency and with fiat money itself; nothing but gold will do. This has been true, of course, for 40 years—since the U.S. went off the gold standard—but only Bernanke has had to implement with such vigor the Fed's original missions of "lender of last resort" and "coiner

of an elastic currency." And he is up there now, in the helicopter, showering us with money, as the Fed didn't do but should have done in 1933. Yet even as this comforts, it elicits in most of us a spasm of wonder, or anxiety, that a single Ph.D. or a building full of them could calibrate such a mystery as the proper quantity of money, particularly in an economy as dynamic as ours is today. Bernanke does not use gold as a measuring stick; he does not count the money in circulation as a basis for determining interest rates, as Volcker did, or tried to do. His mentor, Milton Friedman, thought the business of adjusting interest rates was so tricky, it would be better to yield the job to a computer. But Bernanke thinks a human can do it. He sticks to his notion of what inflation should be, and his prediction of where it is headed, trusting that his judgment will tell him when to add more liquidity, when to subtract. And, to a greater extent than he is credited with now, history may marvel that Bernanke has been a success.