CHAPTER 4

Suffering Mid-Life Crises: Confronting Severe Inflation and Financial Meltdown in Adulthood—February 1970–January 2014

The central bank is always caught up in, and reacting to, the swirl of powerful historical currents. But Fed actions in turn also have importantly influenced the direction of those forces, both for good and ill. It is a crucial actor in the saga of American history, but it plays a part that, owing to its complexity and technicality, is underappreciated not only by the media in the noisy onrush of daily events but also even by historians, who have the luxury of quiet reflection on broad developments. This chapter's glimpse of the main cast of characters and patterns of policy design, implementation, and communication since the era of Chairman Martin, which ended in January 1970, makes an effort to identify the crucial elements. The names of the chairmen of the Board of Governors and of the House and Senate Banking Committees since early 1970 appear in Table 4.1. The dates of the major turning points in the FOMC's design, implementation, and communication of policy are presented in Tables 4.2, 4.3, and 4.4. Back in junior high school I remember another student asserting what was to become a cliché later in my education: History is just a collection of names and dates. Fortunately, that student's observation was in error, because if it actually were the case, then all the subsequent chapters that put analytical meat on these bones in the Bernanke era would be superfluous. Still, the tables do allow the chapter to close with a narrative covering the Fed's influence since early 1970 that can be brief.

Identifying Crucial Names in Policymaking

The reader now can scan the cast of characters in the drama to come in later discussions by referring to Table 4.1, where the top guns at the Fed and at the two relevant congressional committees appear. We'll see later that while some of the names represent only bit players in our unfolding saga, others will assume leading roles. The

Table 4.1 Chairmen of the FOMC and of the House and Senate Banking Committees, 1970–2013

Year (Congress)	*FOMC*	*House Banking Committee*[1]	*Senate Committee on Banking, Housing and Urban Affairs*
1970 (91st)	Arthur Burns	Wright Patman (D-Tex.)	John Sparkman (D-Ala.)
1975 (94th)	”	Henry Reuss (D-Wis.)	William Proxmire (D-Wis.)
1978 (95th)	G. William Miller	”	”
1979 (96th)	Paul Volcker	”	”
1981 (97th)	”	Fernand St Germain (D-R.I.)	Jake Garn (R-Utah)
1987 (100th)	Alan Greenspan	”	William Proxmire (D-Wis.)
1989 (101st)	”	Henry Gonzalez (D-Tex.)	Donald Riegle (D-Mich.)
1995 (104th)	”	James Leach (R-Iowa)	Alfonse D’Amato (R-N.Y.)
1999 (106th)	”	”	Phil Gramm (R-Tex.)
2001 (107th)	”	Michael Oxley (R-Ohio)	Paul Sarbanes (D-Md.)[2] Phil Gramm (R-Tex.) Paul Sarbanes (D-Md.)
2003 (108th)	”	”	Richard Shelby (R-Ala.)
2007 (110th)	Ben Bernanke	Barney Frank (D-Mass)	Chris Dodd (D-Conn)
2011 (112th)	”	Spencer Bachus (R-Ala.)	Tim Johnson (D-SD)
2013 (113th)	”	Jeb Hensarling (R-Tex.)	”

Note: Entries appear for each year in which the chairmanship of any of the three panels changed.
1. In the 107th Congress, the House Banking Committee became the Committee on Financial Services; the earlier names of the committee, beginning with the 91st Congress, are as follows:
91st–93rd: Banking and Currency
94th: Banking, Currency and Housing
95th–103rd: Banking, Finance and Urban Affairs
104th–106th: Banking and Financial Services.
2. At the convening of the 107th Congress, on January 3, 2001, the membership of the Senate was evenly divided by party, but the Democrats controlled the Senate because the Democratic president and vice president were still in office (and the latter, as president of the Senate, was able to break tie votes in that chamber); at that time the Democrats named Paul Sarbanes to head the banking committee. On January 20, 2001, when the Republican President and Vice President were sworn in, control of the Senate shifted to the Republicans, who named Phil Gramm to head the committee. On June 6, 2001, Senator James Jeffords, of Vermont, changed his affiliation from Republican to Independent and voted with the Democratic Caucus; the Democrats thus regained the majority in the Senate and again named Senator Sarbanes to head the committee.
Source: David E. Lindsey, *A Modern History of FOMC Communication: 1975–2002*, FOMC Secretariat, Board of Governors of the Federal Reserve System, June 24, 2003, Table 1, p. 5.

congressional personalities will be seen as neither all bad nor all good. Similarly, no Fed official will be portrayed as an unvarnished hero or villain, though in my review of their performances, Paul Volcker will approach the former category, with Alan Greenspan running a close second until late in his stewardship. Ben Bernanke warrants a mixed review: Yes, his leadership unquestionably and importantly did help to save the world during the financial crisis, and some of his actions before and after were laudable as well, but some actions will be questioned. San Francisco Fed President and then-Board Vice Chair Janet Yellen certainly will share in many of these successes but will bear some responsibility for a few of the dubious initiatives as well.

Identifying Crucial Dates in Policy Design

The first entry of Table 4.2 describes Fed's proclivity in the 1970s to "look at everything" eclectically in designing monetary policy. But the Fed acted as if it mainly relied on forecasts of an output or unemployment gap based an implicit objective for the "potential" or "natural" level and of the gap of inflation relative to a low implicit goal. That approach came a cropper as the Fed grossly exaggerated the economy's ability to employ workers without creating runaway inflation. Also, in gradually adjusting its policy stance, the Fed had a tendency to swing the funds rate back and forth in "stop/

Table 4.2 Major Turning Points in Monetary Policy Design, 1970–2013

Turning Points
1. Designing Policy Eclectically Looking Forward but Pushing Average Unemployment Too Low with a Gradual Stop/Go Policy Stance and Inducing Rising Inflation February 1970–September 1979
2. Controlling Current M1 Growth with Little Gradualism and Fostering Disinflation October 1979–September 1982
3. Designing Eclectically Looking Backward with No Gradualism and Holding the Line on Inflation October 1982–August 1987
4. Designing Eclectically, Preemptively, Gradually, and Steadying the Economy while Disinflating More August 1987–July 1996
5. Designing Eclectically, Less Preemptively, Gradually, and Steadying the Economy at Price Stability August 1996–February 2008
6. Handling the Financial Meltdown with Unconventional Lending Policies March 2008–October 2008
7. Confronting Economic Weakness and Disinflation by Making Large-Scale Purchases of Securities and Extending Their Average Maturity November 2008–December 2013

go" fashion as economic, financial, and monetary conditions changed. On average policy stimulation was excessive and the unemployment rate was pushed too low. Combined in mid-decade with the end of wage and price controls as well as late in the decade with hikes in food and energy prices, inflation climbed to dizzying heights.

The Fed's abrupt conversion to a focus on monetary control is represented in the second line. That era was initiated at a dramatic meeting of the FOMC on Saturday, October 6, 1979. This event turned into a three-year episode of fighting the high inflation via controlling current medium-term money growth. (Money is the outstanding stock held by the public of currency and readily accessible deposits at banks.) The Fed tried to restrain the expansion of the narrow measure of transactions balances, as captured by the M1 measure of the money stock made up only of the public's holdings of currency plus checking accounts, that is, the balances that can facilitate purchases directly. Fed policy had little gradualism. In fact, the trend in M1 growth did slow, and inflation started to fall, an outcome in Table 4.2 called "disinflation."

But unstable demands for money and finally a regulatory fillip to the amount demanded, along with severe economic weakness that ultimately brought the civilian unemployment rate to 10.8 percent, caused the FOMC in early October 1982 to move to the third line. After having boosted the target for M1 growth three months earlier, which already had lowered the funds rate a lot, it finally dropped M1 targeting altogether and again became more eclectic in designing policy. In looking backward, it now acted as if it focused both on realized output growth and inflation relative to implicit objectives while eschewing any policy gradualism. Although economic activity regained traction, the Fed hung tough enough for inflation to recede further.

In the late 1980s the Fed continued to design its policy eclectically (see Table 4.2, line four). But it also reintroduced more gradual adjustments to the policy setting and a reliance on the outlook for both inflation and resource use compared with implicit objectives. A mild recession marked the early 1990s, but core inflation excluding food and energy prices kept ebbing through mid-1996.

Thereafter, the Fed faced a rapid-fire succession of unexpected crises (see Table 4.2, line five), so it had to design its policy less preemptively, though still focusing on gaps in both resource use and inflation with a continued gradual adjustment of its policy setting. The Fed successfully stabilized the rate of core inflation at reasonable price stability. Over the entire score of years described by this line, stable prices seemed to help steady the economy.

The smooth economic sailing was not destined to last. Some shots across the economy's bow that signaled underlying financial stress sounded in 2007, particularly the start of the collapse of the subprime mortgage market. But the date in line six on Table 4.2 for the inception of the financial meltdown is March 16, 2008, which marked the forced sale of Bear Stearns, an intermediate-sized investment bank, to JPMorgan Chase, a large commercial and clearing bank. That arranged merger involved a guarantee by the Fed of $29 billion of Bear Stearns's shaky real-estate-related securities. In September 2008 all hell broke loose when no private buyer emerged for Lehman Brothers, a larger investment bank, which consequently went belly up. The central bank initially responded to the ensuing financial crisis by making a variety of unusual emergency loans. Many of these loans required invoking the part of the Federal Reserve Act that had lain dormant since the 1930s, allowing such lending to nonfinancial entities in "unusual and exigent" circumstances. The Fed also issued nearly $585 billion swaps of dollars for foreign currencies with central banks abroad. The emergency lending fell to zero as the financial crisis abated.

But confronted by continuing economic weakness, the Fed already had initiated other unorthodox measures starting in November 2008 (see Table 4.2, line seven). Through mid-2011, it bought $2.3 trillion of agency-guaranteed mortgage-backed securities, agency debt, and longer-term Treasury securities. Those operations, popularly called "quantitative easing," ballooned the Fed's balance sheet in an unprecedented manner. Then from September 2011 to December 2012 it lengthened the average maturity of its portfolio with a procedure called "operation twist" outside the Fed. Three months before that program expired, the Fed adopted open-ended purchases of MBS, and in late-2012 it elected to continue buying long-term Treasuries, for a monthly total of $85 billion. A year later it decided to "taper" its buying despite disinflation that had lowered 12-month core consumer price inflation to almost half its newly explicit 2 percent goal.

Identifying Crucial Dates in Policy Implementation

In the 1970s, as indicated in line one on Table 4.3, the Fed generally geared its daily operations to affect the interest rate charged overnight by one bank to another on the loans of reserves. (As a reminder, reserves are the funds a bank holds at the Federal Reserve, either in the form of cash or in its deposit account.) Interbank loans of reserves are called federal funds. That interest rate is naturally called the federal funds rate, which within the first year of the episode became the Fed's internal operating objective. By adding or draining the overall amount of reserves through its operations in the open market, the Fed can closely control the day-to-day federal funds rate.

In line two on Table 4.3, the FOMC switched in October 1979 to operating on the reserve balances that were supplied by the Trading Desk at the New York Reserve Bank—called nonborrowed reserves since they weren't borrowed by banks from the Federal Reserve. The public's desire to hold money as bank deposits along with the regulations requiring minimum ratios of reserves would establish the reserves that banks had to hold. Those required reserves plus banks' desire for a little excess in turn would interact with the operating path for nonborrowed reserves to determine the amount of borrowed reserves, which were lent to banks only temporarily at the

Table 4.3 Major Turning Points in Monetary Policy Implementation, 1970–2013

Turning Points
1. Operating in Effect on the Federal Funds Rate February 1970–September 1979
2. Operating on Nonborrowed Reserves October 1979–September 1982
3. Operating on Borrowed Reserves October 1982–Thanksgiving 1989
4. Operating on the Federal Funds Rate Thanksgiving 1989–December 2013

Reserve bank's so-called discount window. The charge to the borrowing bank was called the discount rate. The interbank market then automatically set the funds rate.

The Fed next switched its operating target from nonborrowed reserves to borrowed reserves in October 1982 (see Table 4.3, line three). When the FOMC forced up the level of borrowing, banks had to bid more aggressively for funds from other banks, so the gap of the federal funds rate over the discount rate tended to widen as well. Although the Reserve banks' directors proposed any change in the discount rate, it was the Board in Washington that disposed. The Fed had a good idea of what funds rate would result given the discount rate and the amount of borrowing.

Another shift in implementation occurred in 1989, this time from borrowed reserves as the Fed's operational objective all the way back to the federal funds rate. Line four on Table 4.3 refers to the episode just before Thanksgiving in which market participants misinterpreted a technical operation of the Trading Desk to add reserves as instead signaling a policy easing. From then on, all the Trading Desk's operations were chosen to signal accurately the FOMC's desired level of the federal funds rate. In short, the FOMC has relied on targeting the federal funds rate in its operations during the last quarter century. In December 2008 the FOMC lowered the funds rate to its minimal lower bound. As noted in the previous table, earlier that year the Fed had begun to supplement the funds-rate approach with unconventional operations.

Identifying Crucial Dates in Policy Communication

The Fed continued its practice of disclosing a detailed paraphrase of the content of its meetings, called the Memorandum of Discussion, after five years, as described in line one on Table 4.4. Also referenced in that line, it continued to release 90 days after the FOMC's monthly meetings a brief summary document with a vague depiction of its decision to impart more or less "firming," "restraint," or "easing" to "money market conditions"—in effect a trading area for the federal funds rate. The Fed made a small step in the direction of greater transparency in January 1974 when the body of that document began to indicate the specifications of the permissible range for the funds rate and the two-month growth rate tolerance ranges for two measures of money. Thus, after a three-month delay, outsiders could learn the specific ranges of the two operating variables through virtually the rest of the decade. The Board soon reacted to a Freedom of Information request by David Merrill in March 1975 by halving the delay to around 45 days.

But the FOMC in May 1976 made the controversial decision to discontinue the Memoranda of Discussion as of mid-March in light of Merrill's subsequent lawsuit and other perceived threats to the confidentiality of its meetings (see Table 4.4, line two). As some compensation, the FOMC chose at that time to shorten the lag of the public release of its lengthened summary document to shortly after the next meeting, that is, to 30 days. Thereafter, the Fed used obscurity for its own protection from political pressure designed to induce the Fed to undertake excessive ease. With economic activity in the doldrums early in the decade of the 1980s, politicians also threatened to pass laws jeopardizing good monetary management. In response, the FOMCs in that decade avoided political dangers by becoming even vaguer about its policy settings.

Congressional and public interest in the detailed records of FOMC meetings exploded in 1993, when political pressure moved away from the old canards in the direction of demands for more openness about the Fed's detailed deliberations. The Fed revealed that it had retained a vast storehouse of unedited transcripts of FOMC

Table 4.4 Major Turning Points in Monetary Policy Communication, 1970–2013

Turning Points
1. Continuing to Release a Detailed Meeting Paraphrase after Five Years and the Policy Setting with a Delay February 1970–mid-March 1976
2. Heightening Secrecy by Dropping the Detailed Paraphrase and then Staying Obscure Mid-March 1976–October 1993
3. Publishing Past Transcripts after Five Years November 1993
4. Announcing the Policy Setting Immediately and then Gradually Starting to Open Up February 1994
5. Publishing Future Transcripts after Five Years February 1995
6. Announcing Immediately Inclinations about the Future Policy Setting May 1999–December 1999
7. Announcing Immediately the Balance of Risks of Rising Inflation versus Economic Weakness January 2000–January 2003
8. Announcing Immediately Vague Forward Guidance about the Policy Setting August 2003–November 2005 and December 2008–July 2011
9. Beginning to Provide Longer-Term Objectives Quarterly January 2009
10. Starting to Give a Press Conference Quarterly March 2011
11. Announcing Immediately an Explicit Expected Forward Date to End the "Exceptionally Low" Rate August 2011, January 2012, and September 2012
12. Beginning to Provide Year-End and Longer-Term Funds-Rate Projections Quarterly January 2012
13. Announcing Explicit Quantitative Guideposts for Initiating Policy Firming and Dropping the Date December 2012
14. Announcing the Tapering of Large-Scale Asset Purchases December 2013

meetings dating back to mid-March 1976. The FOMC decided in November 1993 to have the staff transform them into "lightly edited" transcripts (see Table 4.4, line three), which, upon completion, would be released to the public once five years had passed going back in time to mid-March 1976. (In February 1995, as shown in line five on Table 4.4, the FOMC determined after extensive deliberations that transcripts of future meetings, once the participants had conducted a review of the draft for accuracy, would be distributed to the public after five years as well.)

At its first meeting in 1994, the FOMC voted not only to start tightening for the first time in five years but also to make an immediate announcement the same afternoon that it had done so (see Table 4.4, line four).Though no precedent was necessarily intended, one was established anyway. After more statements following some meetings in 1994, the FOMC finally decided in February 1995 that it always would announce right away any changes that it had made to monetary policy. Thereafter, the Fed began a gradual process of enhancing its transparency.

In May 1999, the FOMC committed the mistake of taking transparency one step too far (see Table 4.4, line six). It concluded that it should release immediately any change in its inclination to either ease or tighten in the near future. But in the latter case such a posture made participants in financial markets understandably jittery about just how new data might make central bank action more or less likely. The FOMC accordingly confronted unusual volatility in financial quotes.

Early in 2000 the FOMC stated that henceforth instead of revealing its own policy predilections it would announce its assessment of the economy's "balance of risks" weighing the severity of heightened inflation versus economic weakness (see Table 4.4, line seven). This language, with the selection of only one of the alternative phrases, would be voted on and released in the statement:

> Against the background of its long-run goals of price stability and sustainable economic growth and of the information currently available, the Committee believes that the risks are [balanced with respect to prospects for both] [weighted mainly toward conditions that may generate heightened inflation pressures] [weighted mainly toward conditions that may generate economic weakness] in the foreseeable future.[1]

In its public posture the FOMC's finger would be moved a little further from the trigger, thereby making financial markets less sensitive to new data, market letters, and FOMC members' pronouncements. The Committee also indicated that a statement would follow each regularly scheduled meeting, regardless of whether or not it had altered that balance or the stance of policy. After three years of applying this approach to the immediate announcement, the Fed permanently moved away from this construction, first by separately assessing the direction of each of the two risks and then by no longer balancing their relative weight.

As denoted in line eight on Table 4.4, the Fed started to give vague forward guidance about its future policy setting from August 2003 through November 2005. It resumed this practice in December 2008 after taking the funds rate to an "exceptionally low" level in face of the financial meltdown but without stating explicitly a likely ending date.

Already in October 2007, when it had settled upon quarterly updates of macroeconomic projections for several crucial variables, it had begun to hint at longer-term values by announcing forecasts covering three years rather than the two-year horizon used previously. In January 2009 (see Table 4.4, line nine) the FOMC began to release its explicit longer-term estimates of the economy's potential real GDP growth rate and the natural unemployment rate consistent with steady inflation. At the same time, it provided its longer-term range of estimates for inflation in consumer prices.

Three years later the FOMC explained that its inflation goal had become a single-valued 2 percent, equal to the upper bound of the earlier range. By then the FOMC already had decided on March 2011 (see Table 4.4, line ten) that on the second day of the two-day meetings when the FOMC updated the economic projections, the chairman would hold a news conference.

As noted in line 11 on Table 4.4, the Committee began in August 2011 to communicate its explicit expectation that a weak economy would be likely to justify an exceptionally low funds rate at least through mid-2013. In January 2012 it revised that terminal date to late 2014, while also releasing for the first time a graph of the year-end funds rate projections of individual meeting participants through 2014 (line 12). It presented a graph as well of the longer-run (5- or 6-year) expectations of meeting participants for the federal funds rate. Late in the summer of 2012, it pushed back the date of expected firming to mid-2015.

In December 2012, the FOMC began to state guideposts for eventual firming (see Table 4.4, line 13). It would stay its hand so long as the unemployment rate remained above 6-1/2 percent unless core consumer inflation threatened to surpass 2-1/2 percent. Because the Committee had explicitly conditioned the first tightening action on the general state of the economy, it was able to drop the expected forward date of the initial uptick in the intended funds rate. In 2013 the Fed's suggestions about an impending "tapering" of large-scale asset purchases induced a significant backup in long rates. After some mixed signals, the FOMC finally announced in December that tapering would start in early 2014 (see Table 4.4, line 14).

Relating Eras of Burns, Miller, Volcker, Greenspan, and Bernanke in a Pithy Narrative

The Fed under Chairman Burns moved up the rate in the market for overnight loans of reserves between banks, the federal funds rate, "too little, too late" in response to inflationary pressures. Unemployment fell too much, while inflation surged into the double digits as the decade came to a close. It hardly seemed coincidental that in the second half of the decade measures of money had often overrun their announced ranges.

After Paul Volcker took the helm, the Fed dramatically announced in October 1979 that it was switching operating procedures from the funds rate to reserves in order better to attain the announced annual ranges for money. The new technique also distanced FOMC members from politically sensitive backups in the funds rate. The inflation rate did subsequently halve, though interest rates spiked, economic activity dropped, and unemployment jumped to a post-war peak.

At the same time, though, the originally higher inflation and associated elevated interest rates had spurred innovations in payments practices and financial deregulation. They made the public's desired money holdings more unpredictable, in turn undercutting monetary targeting. The Fed's "practical monetarism" then was victimized further by the successful assault on inflation itself. At last the Fed could sharply lower short-term interest rates, which in turn induced a major one-time boost to the stock of narrow money that the public wanted. However, the recession as well as shaky loans to Latin America had rendered the firming in the funds rate that would have accompanied any effort to hit the lower money growth range an absolute nonstarter. The Fed instead started easing in the middle of 1982 and announced in October that it was abandoning its reliance on transactions money. Despite appreciable monetary easing on balance, the actions of President Reagan's newly appointed governors suggest that they were growing increasingly restive about insufficient accommodation. In February 1986, the reconstituted Board outvoted Chairman Volcker to cut the discount rate. The decision was rescinded later that day, but Volcker never retained his previous influential leadership role.

Under Alan Greenspan, who became chairman in August 1987, the FOMC kept output fluctuations to a minimum, while nudging inflation even lower. After the mid-1990s, Greenspan alone recognized that more Fed tightening was unnecessary, as the unemployment rate could continue drifting lower without inducing ever more inflation. The FOMC's responses to a variety of potential mishaps kept them to mere "bumps in the road." Monetary policy generally was impressive during his 18-and-a-half-year tenure. Still, he bears a noticeable share of the blame for the housing bubble. His FOMCs not only imparted overly easy monetary conditions from the autumn of 2003 through most of 2005 but also publicly telegraphed the Fed's initial unchanged accommodation and then its regular, too-gradual, stair-step removal until just before Ben Bernanke took over.

After that bubble burst during Chairman Bernanke's first term, prices on mortgage-related securities tanked, Lehman Brothers folded, financial firms stopped lending, and credit markets imploded. The Fed made unprecedented types of emergency loans and dropped the funds rate to rock bottom. It then undertook two rounds of buying huge amounts of mortgage-related and then Treasury securities, which blew up its balance sheet. The Fed then started lengthening the average maturity of its portfolio of Treasury securities by replacing short-dated Treasury bills with longer-dated notes and bonds, which continued until its bill holdings were depleted. The Fed adopted open-ended large-scale purchases of mortgage-backed securities in late summer of 2012 and augmented the program near year's end by retaining the previous pace of acquisitions of long-maturity Treasury securities. Although the economic recovery remained lackluster and inflation stayed low, the Fed decided in December 2013 to taper its purchases.

As to communication practices, the FOMC had been forced to use obscurity in its communications to protect itself from political pressure to inflate until well into Greenspan's tenure. The Fed had switched internally in the autumn of 1982 from nonborrowed reserves to borrowed reserves to guide operations, yet made no public admission of its apostasy. After the market misinterpreted a signal from open market operations just before Thanksgiving 1989, the Committee went all the way back to implementing policy through the funds rate to avoid confusing anyone on the outside about the stance of policy—ultimately altering all of its communications accordingly. Just after its first meeting in 1994, the FOMC announced right away that it was lifting its intended funds rate for first time in five years. Later, as noted, the Greenspan Fed publicly previewed its easy stance after mid-2003 before telegraphing each regular but minor tightening after mid-2004. Chairman Bernanke supplemented unconventional policy easing by overseeing a wide variety of initiatives that augmented Fed transparency.

The next chapter embarks on an extended excursion into macroeconomics. It takes the form of a description of some generalities about the Fed's thinking on the workings of the economy and the process of designing, implementing, and communicating its monetary policy.