Contents lists available at ScienceDirect

Journal of Monetary Economics

journal homepage: www.elsevier.com/locate/jme

Lessons from history for successful disinflation[‡]

Christina D. Romer^{*}, David H. Romer

University of California, Berkeley, United States of America

ARTICLE INFO

JEL Classification: E31 E52 E58 E65 N12 Keywords: Disinflation Monetary policy Commitment Inflation expectations Narrative approach

ABSTRACT

Why are some attempts at disinflation successful and others failures? We investigate this question in the context of the Federal Reserve's attempts at disinflation since World War II. Our central finding is that a fundamental determinant of success was the strength of the Federal Reserve's commitment to disinflation at the start of its attempts. In episodes where its commitment was high, there were significant declines in inflation that were often long-lasting, while in ones where its commitment was low, falls in inflation were small and short-lived. We find that although the extent of the Federal Reserve's commitment was often clear to the public, there is no evidence that stronger commitment to disinflation directly affected expected inflation. Rather, the main channel through which weak commitment led to unsuccessful disinflation was premature abandonment of the disinflationary policy. We conclude by discussing the implications for the Federal Reserve's current effort at disinflation.

1. Introduction

Over history, central bankers have repeatedly attempted to reduce the rate of inflation. The outcomes of those attempts in the United States since World War II have been very mixed. Most famously, the Federal Reserve's efforts to reduce inflation that began in October 1979 and May 1981 eventually led to a large and persistent fall in inflation, but the three attempts in the decade before were abject failures. This paper investigates what accounts for this variation: Why are some attempted disinflations much more successful than others? This question takes on particular relevance in 2024 because the Federal Reserve is currently engaged in another attempt to reduce inflation. What does history suggest about its likely chance of success?

Monetary policy affects inflation through two primary channels: the Phillips curve and expected inflation. As a result, it may seem natural to place blame for the variation in success on shocks to the Phillips curve or differences in the response of expected inflation to the disinflationary policies. But this line of analysis misses the key fact that decisions to disinflate are dynamic. Monetary policymakers have the ability to strengthen policy if they are not achieving the desired fall in inflation. Thus, a fundamental determinant of whether disinflations are successful must lie with the motivation and decisions of policymakers.

For this reason, we focus on the thinking and behavior of policymakers in disinflationary episodes. In the United States, the narrative record identifies nine times since World War II when Federal Reserve policymakers decided that the current inflation rate was unacceptable, and took contractionary actions to reduce it (Romer and Romer, 2023). In all of these episodes, monetary

* Corresponding author.

E-mail address: cromer@berkeley.edu (C.D. Romer).

https://doi.org/10.1016/j.jmoneco.2024.103654

Received 24 June 2024; Received in revised form 8 August 2024; Accepted 8 August 2024

Available online 13 August 2024







^{*} We are grateful to Laurence Ball, Yuriy Gorodnichenko, Donald Kohn, and conference participants at the National Bureau of Economic Research for helpful comments and suggestions. This paper was prepared for the NBER conference on Inflation in the COVID Era and Beyond supported by the Smith Richardson Foundation.

^{0304-3932/© 2024} The Authors. Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

C.D. Romer and D.H. Romer

policymakers sought to reduce the current rate of inflation (not merely prevent inflation from rising further), and were willing to accept output consequences to bring the reduction about. But in analyzing the record of policy discussions, we discover important differences in policymakers' commitment to disinflation at the times the policies were embarked on.

We categorize this variation in commitment using what policymakers said about several issues both in the policy records and in public speeches and testimony. One important criterion is how much output loss policymakers were willing to accept to bring inflation down. Did they convey a willingness to do whatever it takes, or did they put clear limits on the costs they were willing to inflict on the economy? Similarly, did they believe that inflation was their problem to solve, or did they feel they were just one piece of the solution? Based on these and other criteria, we conclude that monetary policymakers were very committed to disinflation in the 1958, 1979, and 1981 episodes; moderately committed in the 1947, 1955, and 1988 episodes; and only weakly committed in the 1968, 1974, and 1978 episodes. For example, in 1981, policymakers felt they had erred in backing away from disinflationary policy in the spring of 1980, and were willing to accept large output losses to finally get inflation down. On the other hand, in 1978, policymakers were adamant that they wanted no more than a mild slowing of output growth, and believed that monetary policy could not reduce inflation on its own.

We show using graphs and simple regressions that monetary policymakers' commitment to disinflation correlates very well with the success of the disinflation. In both 1958 and 1979/1981, when policymakers were highly committed to disinflation, inflation not only came down, but stayed down for an extended period. In contrast, when policymakers were only weakly committed, such as in 1968 and 1978, inflation fell little and soon rebounded. As a simple way of summarizing the variation in commitment, we create a dummy variable for disinflationary monetary shocks that is scaled by the degree of monetary policymakers' commitment to disinflation. A local projection regression of inflation on the scaled dummy shows a noticeably tighter relationship between monetary shocks and disinflation than the same regression using the unscaled dummy.

Having identified this correlation between policymakers' ex ante commitment to disinflation and their ultimate success, an obvious question is what the mechanism is through which commitment matters. We identify two potential channels by which higher commitment fosters success: by lowering expected inflation and by avoiding premature easing.

To investigate the expectations channel, we look at newspaper reports concerning monetary policy during disinflationary episodes. The goal is to see if the differences in commitment we see in the confidential policy discussions were likely known to market participants and ordinary citizens at the time. We find that, to a substantial extent, they were. For example, in 1981, the *New York Times* described the Federal Reserve's redoubled commitment to conquer inflation, and said policymakers were willing to accept a severe recession to bring disinflation about. In contrast, in 1978, the news reports, which had described Federal Reserve Chairman G. William Miller as an ardent inflation fighter early in his tenure, increasingly emphasized the weakness of the Federal Reserve's disinflation program as time wore on.

Given that substantial variation in the Federal Reserve's degree of commitment to disinflation was evident to the public during the episodes, we look to see if this variation is reflected in the behavior of expected inflation. We find that regardless of the degree of commitment conveyed by coverage of monetary policy during disinflationary attempts, there is essentially no change in professional inflation forecasts around the time of the coverage. And in the current episode, where we can use high-frequency data, we find no tendency for market-based measures of expected inflation to fall on the days with the clearest reports of new evidence of Federal Reserve commitment to reducing inflation.

To investigate the effect of premature easing, we follow the discussion in policy meetings from the decision to disinflate through to the decision to ease or greatly weaken the disinflationary policy. We find wide variation in how quickly policymakers reversed course. While in some cases the disinflationary policy was ended because inflation had been reduced to the desired level, in many others the policy was abandoned despite concern that inflation was still too high. We find that low ex ante commitment to disinflation is strongly correlated with the premature ending of contractionary policy. We also analyze the reasons that policymakers gave for moving away from disinflationary policy before inflation was reduced. The common motivations we find are a belief that the output costs were too high, that monetary policy had done its part and it was time for other policymakers (and perhaps private actors) to contribute, and a fear that continued tight monetary policy would lead to overly loose fiscal policy. Crucially, the reasons policymakers gave for premature easing map closely to the degree of initial commitment to disinflations. For example, less committed policymakers tended to limit the output losses they felt were acceptable, and to abandon disinflationary policy as soon as output losses reached relatively low levels.

Our analysis of the lessons from history for successful disinflation is organized as follows. Section 2 discusses why it is important to focus on deliberate attempted disinflations. In particular, we argue that episodic analyses based on large observed falls in inflation provide an unreliable guide to successful policy. Section 3 discusses the narrative evidence on monetary policymakers' commitment to disinflation in the nine shifts to anti-inflationary policy in the United States between 1946 and 2016. Section 4 looks in detail at the behavior of inflation in these attempted disinflations, with an emphasis on the correlation between the success of disinflation and policymakers' commitment. Section 5 examines whether greater commitment to disinflation was conveyed to the public through news reports, and whether that news had an effect on expected inflation. Section 6 provides narrative evidence about when and why disinflationary policy was ended in each episode, and investigates whether weaker commitment tended to lead to premature policy reversal.

Finally, Section 7 concludes and discusses the implications of our study for the recent episode. In the summer of 2022, monetary policymakers again decided that the prevailing rate of inflation was unacceptable, and that they were willing to accept output consequences to reduce it. Does history suggest that the policy is likely to be successful? Given our finding that policymaker commitment has been crucial in the past, we examine the narrative record to assess policymaker commitment to disinflation in the current period. We find that the language used both in the policy discussion and in the public testimonies and speeches mimics that of the most committed disinflations of the past. Based on this, we would expect policymakers to stick with the disinflation program until inflation is reduced. Thus, we anticipate that the policy will ultimately be successful.

2. Why focus on deliberate attempted disinflations?

In this paper, we focus on what makes some deliberate attempted disinflations more successful than others. A tempting alternative is to look instead at large actual disinflations, and search for connections among them.¹ This section discusses why we eschew this approach. It also discusses our identification of attempted disinflations.

2.1. Problems with focusing on ex post disinflations

Fig. 1 presents a graph of inflation measured using the price index for personal consumption expenditures excluding food and energy. The sources of this series and all other data used in the paper are described in Online Appendix A.² As can be seen in the graph, some of the most spectacular disinflations occurred in 1947–48, 1951, 1975–76, and the early 1980s.

2.1.1. Overemphasis on episodes involving price controls

One thing this list of disinflations points to is the important role that price controls and their discontinuation played in some of the biggest disinflations. Price controls and rationing were used extensively for consumer goods during World War II. The controls were temporarily abolished in June 1946; reinstated in a weakened form in July 1946; and then permanently ended in November 1946 (Rockoff, 1984). Though many factors, including supply disruptions and pent-up consumer demand, played a role in the immediate postwar inflation, the abolition of price controls unquestionably played a large role.³ Evans (1982) estimates that controls held prices roughly 30 percent below their equilibrium level during the war—implying that their removal almost certainly led to a temporary surge in inflation. As a result, much of the spectacular disinflation observed in the data in late 1946 and early 1947 reflects the end of this rapid readjustment to market equilibrium prices.

The large disinflation in 1951 was also both indirectly and directly related to price controls. When the Korean War broke out in June 1950, consumers reacted with panic buying. Fearing a return to rationing, they attempted to stockpile goods that had been hard to get during World War II (Ginsburg, 1952). Not surprisingly, prices jumped—implying a surge in inflation. Price controls were introduced in January 1951. In addition, a large tax increase passed in 1950Q4 and a decline in the sense of panic helped quell the surge in consumer spending. Likewise, the Federal Reserve-Treasury Accord in March 1951 led to expectations that the Federal Reserve would be able to counter rather than exacerbate wartime increases in aggregate demand. The result was a rapid drop in inflation in the second quarter of 1951.⁴

The less dramatic, but still striking, drops in inflation in 1971 and 1975 were related to the Nixon wage and price controls. The Economic Stabilization Act of 1970 enacted in August 1970 gave the President the authority to control wages and prices. Phase I was a 90-day freeze on wages and prices that began in August 1971. It was followed by Phase II, which lasted until January 1973 and held wage and price increases to firm guidelines set by the Cost of Living Council. Whiteman (1978) estimates that the controls lowered CPI inflation by 3 to 6 percentage points in late 1971 and 1972. Inflation then jumped rapidly when controls were weakened in early 1973 and removed in April 1974. As in 1947, some of the rapid disinflation in late 1974 and early 1975 can be understood as the result of the end of the one-time jump in prices needed to return prices to their equilibrium levels.

That four of the most striking disinflations involved imposition and/or removal of price controls suggests that such episodes provide little guidance for modern policymakers, who show scant interest in such measures. Moreover, the lesson from these episodes is hardly an encouraging one. Price controls often led to disinflations through the intermediate step of causing a one-time jump in inflation when market forces were once again allowed to operate, which then dissipated.

2.1.2. Underemphasis on smaller, more persistent disinflations

Another limitation of focusing on actual disinflations is that it tends to miss smaller, but actually very successful disinflations. As can be seen in Fig. 1, there were disinflations in the late 1950s and the late 1980s that were relatively modest, but very persistent. The 1958–59 disinflation brought inflation down from roughly 3 percent to $1\frac{1}{2}$ percent, and it remained low through 1965. Likewise, the 1989–96 disinflation reduced inflation gradually from 4 percent to 2 percent, where it remained until 2005. Such modest but persistent disinflations can be quite impactful on the price level. Thus, in thinking about the lessons for successful disinflation, such episodes should be included.

2.1.3. Poor guide to policy

Perhaps the most important downside of focusing on actual disinflations is that any such analysis provides a poor guide to policy. Focusing on times when inflation actually fell is effectively selecting based on outcomes, and thus can bias any analysis of the effects of disinflationary efforts. That approach includes episodes where inflation fell without any active efforts by policymakers to bring it down (which are uninformative about the effects of attempts to reduce inflation), and excludes ones where policymakers set out to reduce inflation and failed (which may be very informative).

² All online appendixes are available on the Science Direct website.

³ See Caplan (1956) for a discussion of inflation in this period.

¹ This alternative approach is used in a widely cited blog post by Rouse et al. (2021) for the Council of Economic Advisers.

⁴ Rouse et al. (2021) note the relevance of price controls to the 1947–48 and 1951 disinflations. Interestingly, there was no surge in inflation when price controls were removed in early 1953. The likely explanation is that the anticipatory jump in prices in 1950 had led to controlled prices that were not substantially out of line with market forces.



Fig. 1. Core PCE inflation, 1946Q4-2023Q4.

Notes: The series graphed is inflation (quarterly, at an annual rate, computed as the change in logarithms times 400) measured using the Personal Consumption Expenditures Price Index Less Food and Energy. Online Appendix A documents the source of the data and describes our continuation of the official series, which begins in 1959Q1, back to 1946Q3.

2.2. Deliberate attempted disinflations

Because of the problems with focusing on ex post disinflations, we instead focus on deliberate attempted disinflations by monetary policymakers. This is obviously only a subset of policy actions taken to try to deal with inflation. There have also been fiscal and regulatory actions to try to lower inflation at various times in the post-World War II period.

2.2.1. Why focus on monetary disinflations?

We focus on monetary disinflations for several reasons. One is simply the practical one that we have already identified deliberate monetary policy attempts at disinflation. Though it is conceivably possible to identify deliberate fiscal disinflations, it would be difficult. Spending decisions, in particular, inherently have multiple purposes, and so classifying their motivation is hard.

A related practical consideration is that most anti-inflationary legislative actions in the postwar United States have been either relatively small or related to price controls. For example, President Jimmy Carter, in a major address on inflation in October 1978, proposed only delaying a tax cut, capping federal pay increases, and voluntary wage and price standards. Thus, anti-inflationary legislative actions are unlikely to have played much role in determining disinflations.

Finally, as is widely understood, inflation is a monetary phenomenon. Or, to put it more moderately, inflation cannot persist without adequate money growth. Thus, deliberate attempts at disinflation through monetary policy are likely to be central to successful disinflations.

2.2.2. Identification of deliberate attempted disinflations

In Romer and Romer (2023), we use the most detailed available records of Federal Reserve policy deliberations to identify deliberate attempted disinflations in the United States for the period 1946 to 2016. In the period after 1976, these records are the verbatim *Transcripts* of meetings of the Federal Open Market Committee (FOMC). For the period before 1976, they are the historical *Minutes* of these meetings, which contain detailed paraphrases of individual comments, each attributed to their speaker.

We identify a deliberate attempt at disinflation by three criteria. First, policymakers must express the view that the current level of inflation is unacceptable and a desire to reduce it. A desire merely to prevent inflation from rising does not, in our classification, count as an attempted disinflation. Second, policymakers must take concrete actions—typically a rise in interest rates—to try to bring about the desired reduction in inflation. And third, policymakers must convey a willingness to accept output consequences from their actions. This requirement can be thought of as a check on whether they are actually trying to reduce inflation; if so, they must be willing to



Fig. 2. Core PCE inflation with dates of disinflationary shocks, 1946Q4-2023Q4.

Notes: The series graphed is inflation (quarterly, at an annual rate, computed as the change in logarithms times 400) measured using the Personal Consumption Expenditures Price Index Less Food and Energy. Online Appendix A documents the source of the data and describes our continuation of the official series, which begins in 1959Q1, back to 1946Q3. The gray vertical lines show the dates of disinflationary monetary policy shocks from Romer and Romer (2023).

accept some fall (or at least the risk of a fall) in real output to bring it about.

We find nine times between 1946 and 2016 when Federal Reserve policymakers met our criteria for an attempted disinflation: October 1947, August 1955, September 1958, December 1968, April 1974, August 1978, October 1979, May 1981, and December 1988. These dates are when we find the narrative record clearly met our criteria. But of course, such actions rarely arise without a gradual evolution of concern about inflation and a willingness to take action despite the possible real consequences. Likewise, deliberate attempted disinflations inherently last for more than a given month. One contribution of Section 6 of this paper is a new chronology of when the disinflationary policy was abandoned or greatly weakened in each episode.

Fig. 2 repeats the graph of core PCE inflation from Fig. 1, with the dates of deliberate attempted disinflations indicated by gray vertical lines. As can be seen, some episodes of extreme disinflation, such as that around the Korean War, have no disinflationary monetary policy actions associated with them. But in general, most successful disinflations have at least one shift to disinflationary policy (and occasionally multiple shifts) in close proximity. It also appears that some attempted monetary policy disinflations, such as those in 1968 and 1978, failed to reduce inflation. The rest of the paper tries to understand this variation in the inflation response.

3. How committed were monetary policymakers in disinflationary episodes?

The explanation for the variation in the success of attempted monetary policy disinflations that we investigate involves variation in policymakers' commitment to the policy. In particular, can differences in monetary policymakers' commitment as they embarked on the shifts to anti-inflationary policy account for much of the variation in ultimate success that we observe?

3.1. How we measure commitment

A crucial step in this analysis is to judge how committed monetary policymakers were to disinflation in the nine episodes.

3.1.1. Sources

To do this, we again read what monetary policymakers said during policy deliberations. Our main sources are thus the *Transcripts* (U.S. Board of Governors of the Federal Reserve System, 1976-2016) and historical *Minutes* (U.S. Board of Governors of the Federal

Reserve System, 1946-1967) of FOMC meetings.⁵ We supplement these records with the public speeches and testimony of the Federal Reserve Chairs.⁶ The records of policy discussions we use were either never intended to be made public, or were understood to be confidential for five years. Chair speeches and testimony, in contrast, are typically prepared in advance and are clearly public documents. As a result, they may be less forthright than the policy records. On the other hand, they are sometimes more detailed and coherent than the unprepared remarks at policy meetings, and so are a useful adjunct to the policy record.

3.1.2. What we look for in the narrative record

We consider various aspects of policymakers' views that fall under the general heading of commitment. The first is the magnitude of the output costs they were aiming for or willing to tolerate. In some cases of a decision to disinflate, policymakers clearly suggested limits on how far they were willing to go to achieve their goal. They may have said, for example, that zero real growth was fine, but a recession was not; or that a recession was tolerable as long as it was not severe. In other cases, policymakers conveyed a much clearer sense that they were willing to take whatever actions were necessary to get inflation down. A willingness to do whatever it takes regardless of costs conveys a greater commitment than actions that were clearly circumscribed.

Second is whether monetary policymakers thought monetary policy could achieve disinflation essentially on its own. That is, did they think it was up to the Federal Reserve to bring inflation down regardless of others' actions, or did they view their responsibility as only to do a part and to rely on others for the rest? A firm belief that monetary policy could and should reduce inflation, regardless of what others were doing, suggests more commitment to disinflation than a belief that monetary policy cannot do it on its own.

Third, did they have a clear goal for what they wanted to bring the inflation rate down to, or just a general desire to reduce it from its current level? A firm goal shows more commitment than a fuzzy goal.

Finally, we consider whether the effort was a "second try" following closely on an earlier effort. Almost inherently, if policymakers launch a new disinflationary effort in the wake of a previous one, they believe they are more serious than they had been in the earlier attempt.

3.2. Examples of the narrative evidence on commitment

We now turn to a discussion of what the narrative record reveals about policymakers' commitment to disinflation in the episodes. Online Appendix B provides a detailed episode-by-episode description of the narrative evidence. Here, we present condensed versions of three of these descriptions to illustrate how we classify commitment.

3.2.1. High commitment episodes

An example of an episode where we find a very high level of commitment to disinflationary policy is May 1981. After allowing interest rates to fall substantially in the spring of 1980, monetary policymakers agreed to take a second serious run at disinflation. A common theme of the policy discussion was that policymakers did not want to repeat the error they felt they had made in their earlier loosening. For example, in December 1980, one Federal Reserve Governor said: "I think we should make every effort to avoid a replay of 1980, with a sharp drop in interest rates which misleads everybody as to what our policy is" (*Transcript*, 12/18–19/1980, p. 43). In July 1981, a Reserve Bank President echoed this sentiment, saying: "Through the course of recent history at least, we've backed off and we've made a mistake each time. I think we have an opportunity this time to carry forward what we should have done before" (*Transcript*, 7/6–7/1981, p. 55). We believe that policymakers' expressions of remorse about not sticking with the previous policy and deciding to try again convey tremendous commitment.

Another sign of strong commitment comes from the clear willingness of policymakers to accept substantial output losses to get inflation down. One Reserve Bank President said: "Are we willing to tolerate—and in fact contribute to—a certain amount of further economic distress in the months and the year ahead if that is necessary to break the back of inflation? And I would say yes" (*Transcript*, 12/18–19/1980, p. 36). At the same meeting, Chairman Paul Volcker said: "We have been put in a position or have taken the position ... that we are going to do something about inflation maybe not regardless of the state of economic activity but certainly more than we did before" (p. 61). Likewise, at the July 1981 FOMC meeting, FOMC Vice Chairman Anthony Solomon said: "I think it's more likely that after a protracted period of these high real interest rate levels we will see a significant recession both here and abroad" (*Transcript*, 7/6–7/1981, p. 22). These comments are about as close to a "whatever it takes" sentiment toward the acceptable costs of disinflation as we see in the historical *Minutes* and *Transcripts*.

Though Volcker mentioned a wide range of other policies that he felt would be useful in lowering the costs of disinflation, his public statements in this episode ultimately put the burden of disinflation squarely on monetary policy. In March 1981, he said: "The Federal Reserve has an indispensable role to play in dealing with inflation. To be effective, we must demonstrate that our own commitment is strong, visible, and sustained. That is our intention" (Volcker testimony, 3/27/1981, p. 10). And in his Humphrey-Hawkins testimony in July 1981, he said: "These considerations help point to the wide range of policies necessary to support a sustained and effective

⁵ In 1967, the historical *Minutes* were replaced by a document called the *Memorandum of Discussion* ((U.S. Board of Governors of the Federal Reserve System, 1967–1976), which contained virtually the same type of records of policy discussions. In what follows, the in-text references to both the historical *Minutes* and the *Memorandum of Discussion* are identified simply as *Minutes*. The transcripts of FOMC meetings are identified as *Transcripts*. All these sources are available on the Federal Reserve website: https://www.federalreserve.gov/monetarypolicy/fomc-historical.htm.

⁶ Specifically, we use the speeches and testimonies collected on FRASER (Federal Reserve Bank of St. Louis, 1946–2022). The materials are found by searching under the title: "Statements and Speeches of [Federal Reserve Chair name]."

effort against inflation. ... But there can be no escaping the fact that monetary policy has a particularly crucial role to play and, in current circumstances, has a particularly heavy burden" (Volcker testimony, 7/21/1981, p. 3).

The one aspect of this episode that does not clearly scream commitment is the lack of a clear goal for inflation. Indeed, one striking feature of the policy discussion in 1981 is the degree to which an ultimate objective for inflation was barely mentioned. It is possible that the goal was so obvious to people in the room that they didn't feel the need to express it. Despite this one aspect of weakness, we feel comfortable scoring this episode at our highest level of commitment.

The two other episodes where we find very high commitment to disinflation are September 1958 and October 1979. The 1958 episode shares with 1981 the characteristic that policymakers were taking a second try at disinflation because they felt they had erred in loosening too soon following the previous attempt. They also expressed the clear goal of not just getting inflation down, but getting it down to zero and dispelling the idea that a positive inflation rate was normal, and a willingness to bear substantial costs for achieving that goal. In 1979, policymakers were very forceful in their desire to reduce inflation and their willingness to accept substantial output costs. They also often spoke directly in policy discussions of their commitment to the new operating procedure that they felt would lead to disinflation. However, two characteristics of the discussion lead us to believe their commitment did not rise to quite the highest level: their disinflation goal was quite vague, and they continued to invoke the need for a wide range of non-monetary policies to achieve disinflation.

3.2.2. Low commitment episodes

An example of an episode where we find a very low level of commitment to disinflationary policy is August 1978. Most important to this classification is the fact that policymakers put strict limits on how much output loss they were willing to risk to bring disinflation about. Chairman G. William Miller said at the September 1978 FOMC meeting: "I would be very cautious to restrain the system more in the face of the pessimistic comments we already have and [precipitate] a recession You know, we are already down to growing at or below the trend line. Really, is there more that we can do short term?" (*Transcript*, 9/19/1978, p. 18, bracketed material in the original). Similarly, one Reserve Bank President said: "It seems to me that there is at least a majority consensus within this group that inflation is a problem and that it would be desirable, if possible, to attempt to slow growth in the aggregates without causing a recession. I think even the most maverick of us would be resistant to anything that would lead to recession" (*Transcript*, 9/19/1978, p. 31). That policymakers were only willing to bring output growth to slightly below trend and were highly averse to a full-blown recession suggests that they were about as far from having a "whatever it takes" attitude as they could have and still be classified as effecting a contractionary monetary policy shock.

A second indication that commitment to disinflation was weak in this episode is that policymakers were very vague about what inflation rate they were aiming for, and they were clearly not in a hurry to get inflation down. At the October 1978 FOMC meeting, Miller emphasized that: "What we need is a steadiness of purpose. Inflation built up over twelve years; we are going to have to wring it out over five to seven years" (*Transcript*, 10/17/1978, p. 23).

A third indication of a low commitment to disinflation is Miller's view that monetary policy could not lower inflation on its own without extreme costs. In a speech in December 1978, he gave long list of other policies that he felt were needed to reduce inflation: "first, fiscal policy; second, incomes policy; third, reduction in regulatory burden; fourth, revitalization of productivity; fifth, a balance in our international accounts; and sixth, a monetary policy which complements and supports the other elements" (Miller speech, 12/12/1978, p. 3). Though putting monetary policy sixth on the list may have been merely a rhetorical flourish, when combined with the other signs of low commitment, it cannot help but feel like an omen.

The two other episodes where we find low commitment (though slightly more than in 1978) are December 1968 and April 1974. The key characteristic these episodes share with 1978 is that monetary policymakers placed clear limits on the output losses they were willing to tolerate to bring inflation down. In both cases, they were willing to accept a slowdown of growth to below trend, but they strongly wished to avoid a clear downturn or a full-blown recession. Also as in 1978, policymakers in these episodes felt that other policies, particularly contractionary fiscal policy, were a crucial complement to monetary contraction. At the same time, in both 1968 and 1974, policymakers voiced more passion for disinflation than in 1978, and had a slightly clearer and more timely goal for inflation.

3.2.3. Medium commitment episodes

An example of an episode where we find a medium or moderate level of commitment to disinflationary policy is August 1955. The most informative statements in the *Minutes* during this episode about willingness to accept or risk output costs are strong but well short of extreme: "the System could never take action that would be effective without taking some risks" (*Minutes*, 8/2/1955, p. 38); "continuing the present policy of tightness without allowing the tightness to become so severe as to be a cause, or to be cited as a cause, of a down turn in the economy, if such a down turn developed" (*Minutes*, 10/4/1955, p. 6); and "a firmer monetary policy—one firm enough to curtail spending and thus dampen price pressures" (*Minutes*, 11/16/1955, p. 20).

Federal Reserve policymakers in this episode viewed all inflation as harmful, and so their goal was to eliminate it. In August 1955, for example, Chairman William McChesney Martin identified the mere fact of "upward price movements" as one of the "danger signals" that "are now flashing red" (*Minutes*, 8/2/1955, pp. 9 and 13). Indeed, discussions of prices were typically framed in terms of the behavior of the price level, not inflation. In a typical statement, FOMC Vice Chairman Allan Sproul said in July 1955, "prices which have been stable, in the aggregate, for two years may be about to get a push on the up-side" (*Minutes*, 7/12/1955, pp. 26–27). But the statements do not extend beyond that—in contrast to the 1958 and 1981 episodes, there was no indication of a desire to decisively address inflation.

Importantly, monetary policymakers had some, though not overwhelming, doubts about their ability to address inflation on their own. Most notably, they viewed "responsible" behavior by private actors—essentially, civic-minded moderation in demands for price and wage increases—as necessary for the economy to reach "potential" output without inflation. In the speech where he gave the

Table 1

Disinflationary monetary	policy shocks scaled	by commitment.

Shock date Commitment to disinflation		Scaled value (1 to 5)	
October 1947	Medium (mixed)	3	
August 1955	Medium	3	
September 1958	High	5	
December 1968	Low to medium	2	
April 1974	Low to medium	2	
August 1978	Low	1	
October 1979	Medium to high	4	
May 1981	High	5	
December 1988	Medium	3	

Notes: The dates of disinflationary monetary policy shocks are from Romer and Romer (2023). The scale of commitment to disinflation runs from a low of 1 to a high of 5. Online Appendix B describes the narrative evidence behind our scaling of commitment.

famous "punch bowl" analogy, Martin immediately pivoted to the essential role of private behavior: "The Federal Reserve ... is in the position of the chaperone who has ordered the punch bowl removed just when the party was really warming up. But unless the business community, leaders in all walks, exhibit moderation, prudence, and understanding, then we will fail" (Martin speech, 10/19/1955, p. 12). The FOMC discussed the limitations of monetary policy at some length in March 1956. The discussion concluded with Martin saying the issue was serious but they should proceed: "the Committee could not expect monetary policy to achieve all of the task. However, the threat of a wage-price spiral was so strong today that the System would be derelict in its duty and obligation if it did not do all that it could do" (*Minutes*, 3/27/1956, p. 34). Thus, it appears that monetary policymakers had some qualms about their ability to address inflation and how far they would go, though not enough to stop them from taking serious action.

The two other episodes where we identify a medium level of commitment are October 1947 and December 1988. 1947 is a complicated case because policymakers were willing to accept substantial output costs and had the clear goal of reducing inflation to zero, but were unsure if they had the tools to bring about the needed contractionary policy in the era before the Federal Reserve-Treasury Accord. Thus, our medium commitment designation reflects an average of strong commitment on two dimensions, and substantial doubt about their capability on the other. In 1988, Chairman Alan Greenspan expressed the very clear goal of reducing inflation to the level where it did not enter into agents' economic decision-making. But policymakers in this episode put clear limits on the output losses they were willing to accept, and felt other policies were important to their ultimate success.

3.3. Discussion and a scaled indicator variable for disinflationary shocks

As we hope these brief narrative descriptions (and the more detailed material in Online Appendix B) make clear, there were large differences in the degree of commitment monetary policymakers brought to disinflation in different episodes. As a crude summary of the narrative analysis, we suggest a rough scaling of commitment in the nine disinflationary episodes we identify. We use a scale of 1 to 5, where 1 is weak commitment and 5 is very strong commitment. We focus on getting the relative level of commitment correct, and so scaling similar episodes similarly. We are less confident that the change in commitment from one level to another is the same across the whole range of commitment. Table 1 shows how we scale each episode.

The variation in commitment to disinflation that we find across postwar attempts at disinflation fits with broader patterns in monetary policymakers' views about the economy. As documented by Romer and Romer (2002), Nelson (2005), Primiceri (2006), and others, there have been important changes in policymakers' understanding of the economy over the postwar period that have had large effects on policy and outcomes. Most notably, the late 1960s and most of the 1970s were the heyday of highly optimistic views about sustainable levels of output growth, highly pessimistic views about the responsiveness of inflation to economic slack, and beliefs that inflation could result from nonmonetary forces and be largely impervious to monetary policy. Thus, it is not surprising that the attempts at disinflation in this period were characterized by a lack of willingness to accept large output costs and a belief that the responsibility of monetary policy was limited. In the 1950s and starting again in 1979, in contrast, monetary policymakers generally believed in versions of the natural rate hypothesis with realistic estimates of the natural rate, and in the idea that inflation was responsive to monetary policy and slack. This variation lines up with our evidence here that in the disinflationary episodes in these periods, monetary policymakers generally thought significant output costs were a price worth paying to reduce inflation, and believed they had the power to bring inflation down on their own.

4. The behavior of inflation in disinflationary episodes

Armed with the narrative evidence of differences in monetary policymakers' commitment to disinflation across the disinflationary episodes, the next step is to see if the behavior of inflation shows a correlation with that commitment.

4.1. Basic facts

Fig. 3 shows three quarterly measures of inflation in each disinflationary episode. The three price indexes are the PCE price index less food and energy (the core PCE price index), the PCE price index, and the GDP price index. We focus on quarterly data because they





Notes: The three inflation series shown are calculated using the Personal Consumption Expenditures Price Index Less Food and Energy (Core PCE), the PCE Price Index, and the GDP Price Index. All three inflation measures are quarterly, at an annual rate, computed as the change in logarithms times 400. Online Appendix A documents the source of the data and describes our continuations of the official series back to 1946Q3. The gray vertical lines show the dates of disinflationary monetary policy shocks from Romer and Romer (2023).

allow us to look at the change in a given quarter (as opposed to the change from a year ago), without facing the volatility evident in one-month changes.

4.1.1. High commitment episodes

The three episodes where we identify high commitment to disinflation are 1958, 1979, and 1981. Panels (b) and (c) of Fig. 3 show that inflation was decidedly lower following the 1958 disinflationary shock than it had been in the mid-1950s. Some of this decline preceded the 1958 shock, and may have been related to the 1955 disinflationary policy or the 1957–1958 recession. But, policymakers in 1958 wanted to get inflation from a low positive number to effectively zero—and they clearly succeeded. The other striking feature is that inflation remained very low through 1965. Thus, this episode is consistent with the view that high commitment may be correlated with a more durable disinflation.

The behavior of inflation in the two Volcker episodes is somewhat hard to disentangle because the two shocks are so close in time. However, the overarching picture of this period (shown in panels (g) and (h)) is that this highly committed disinflationary policy was followed by a substantial and highly durable fall in inflation. Inflation measured using the core PCE price index fell from around 9 percent in 1980 to around 4 percent in 1984. And, though individual series bounced around somewhat, inflation was generally below 4 percent through the late 1980s. The timing of the decline in inflation suggests that both shifts to disinflationary policy played a role. Inflation was generally flat over the year following 1979Q4, but then dipped noticeably just before the second try at disinflation in 1981Q2. After the 1981 shock, inflation fell rapidly and continuously. Thus, the behavior of inflation in these episodes is again consistent with the view that highly committed disinflationary policy is associated with sizeable and lasting disinflation.

4.1.2. Low commitment episodes

The 1968 shock is one where we find low commitment to disinflation. As can be seen in panel (d) of Fig. 3, inflation was remarkably steady at over 4 percent for almost all of the three years following the shock. Not until wage and price controls were imposed in August 1971 did inflation show a noticeable drop. Thus, in this case, a low commitment monetary contraction was associated with little or no actual disinflation.

The 1974 shock (panel e) is another characterized by low commitment. The trend in prices following this episode is complicated by the oil embargo that began in October 1973 and ended in March 1974. Oil prices surged during the embargo and then leveled out after the embargo ended. As oil price inflation went from low to high and then back to low, we would expect rising overall inflation followed by falling inflation—which is exactly what we see in the data. Thus, it is likely that the rapid drop in inflation immediately after the monetary shock in 1974Q2 is due to geopolitical developments surrounding oil, not to monetary policy. Perhaps a better indication of the impact of the monetary shock is a comparison of inflation before October 1973 and after early 1975 (when the transition to stable oil prices had time to be reflected in overall inflation). Core PCE inflation was roughly identical pre-1973Q4 and post-1975Q2—suggesting little progress on inflation. Inflation measured using the GDP and PCE price indexes shows slightly more progress, but it was short-lived. Thus, with some admitted twists and turns, this episode too is consistent with the notion that low commitment to disinflation is associated with little actual disinflation.

The 1978Q3 shock is the one we rate lowest in policymaker commitment to disinflation. Clearly, the inflation series shown in panel (f) do not show much success. However, oil price movements again complicate the analysis. A second oil price shock led to rising oil prices between mid-1979 and mid-1980. Thus, at least some of the dismal performance of inflation in this episode is surely due to factors outside monetary policymakers' control. The most one can say from a simple graph of the inflation data is that there is no evidence that this low commitment monetary contraction was successful in reducing inflation.

4.1.3. Medium commitment episodes

In the 1947 disinflationary shock, monetary policymakers very much wanted to get inflation down and had a clear inflation goal, but they were unsure about whether they possessed the tools needed to actually bring disinflation about. As a result, we scale it as a medium level of commitment overall. Nevertheless, the inflation data in panel (a) of Fig. 3 show that inflation fell quite strongly in this episode—from roughly 8 percent in late 1947 to below zero in 1949. Some of this fall in inflation could have been the result of the rapid reconversion of wartime production to meet the surge in consumer demand in the early postwar period (Caplan, 1956). But it is also consistent with the notion that moderate commitment to disinflationary policy is associated with at least moderate disinflation.

The 1955Q3 episode is another where we identify moderate commitment to disinflation. Panel (b) of Fig. 3 shows that inflation initially rose noticeably after the contractionary shock—presumably for reasons in train before the policy shift. Then, starting roughly a year and a half after the shock, inflation began to fall irregularly. After three years, inflation had declined by about 2 percentage points. This episode suggests that moderate commitment may be associated with a moderate and somewhat noisy decline in inflation.

The behavior of inflation following 1988Q4, the third episode where we identify a moderate commitment to disinflation, follows a similar pattern. As seen in panel (i), inflation bounced around substantially for close to two years following the shock, before starting to fall consistently. Inflation fell roughly $1\frac{1}{2}$ percentage points by three years after the shock, and 2 percentage points by four years after.

Taken together, this review of the behavior of inflation following episodes of deliberate disinflationary policy is consistent with the view that the degree of commitment policymakers had to disinflation is correlated with the success of the disinflation. High commitment to disinflation was followed by sometimes sizeable and always durable disinflation; low commitment was followed by flat or rising inflation; and moderate commitment was followed by irregular but at least moderate disinflation. At the same time, the correlation is far from perfect. Additional factors such as fluctuations in oil price inflation and variation in the starting rate of inflation clearly also influenced the behavior in inflation during periods of deliberate disinflationary policy.





Fig. 4. Response of GDP price index inflation to a disinflationary shock.

Notes: The solid lines in both panels show the impulse response function of GDP Price Index inflation to a disinflationary monetary policy shock estimated using the local projection approach described in Section 4.2. The dashed lines in panel (a) are the two-standard-error bands. In panel (a), the dark blue line labeled "Unscaled" is from the specification using a simple 0–1 dummy variable for monetary policy shocks; the light blue line labeled "Scaled" is from the specification using a dummy variable scaled by commitment (shown in Table 1). The light blue line multiplies the coefficient estimates by the mean commitment level in the nine episodes (which is 3.11). In panel (b), the point estimates from the regressions using the scaled dummy variable are multiplied by 1 (low commitment, the light blue line), and by 5 (high commitment, the dark blue line).

4.2. Regression analysis

In Romer and Romer (2023), we use a local projection approach to estimate the response of inflation to disinflationary monetary policy shocks. In that analysis, the key explanatory variable is a simple dummy variable for the dates of the policy shocks.⁷ Given the variation we identify in policymakers' commitment, it is natural to see how the results change if we replace the simple dummy with one scaled using our measure of commitment given in Table 1.

⁷ The specification for the regressions is that inflation h quarters after time t is regressed on a constant, four lags (relative to time t) of both inflation and the monetary shock indicator variable, and the shock indicator at time t. The coefficients on the shock variable for values of h from 0 to 20 quarters after the shock are an estimate of the impulse response function.

Panel (a) of Fig. 4 shows the results for inflation measured using the GDP price index. The solid dark blue line replicates our previous results using the unscaled shock variable; the dashed dark blue lines show the two-standard-error bands.⁸ The light blue lines show the point estimate and error bands for the specification using the shock series scaled by commitment. To ease comparison of the two estimates, we multiply the point estimate and standard errors from the regression using the scaled series by the average of the commitment rankings. The estimated impact of a disinflationary shock is more consistently negative and more precisely estimated using the scaled dummy in place of the unscaled dummy. There is also much less evidence of a price puzzle at short horizons using the scaled dummy. This is suggestive evidence that taking into account policymaker commitment to disinflation helps improve the explanatory power of the regression.⁹

Panel (b) of Fig. 4 provides a visualization of how the impact of a disinflationary shock depends on the degree of commitment. Using the regression with the scaled shock dummy variable, we show the impulse response function evaluated at the lowest and highest levels of commitment. The light blue line shows the response of inflation to a disinflationary shock with the lowest level of commitment (a 1 on our scale); the dark blue line shows the response to a disinflationary shock with the highest level of commitment (a 5 on our scale). As can be seen, a contractionary monetary policy backed with very weak commitment results in a fall in inflation of roughly $\frac{1}{2}$ percentage point after five years. A contractionary shock backed by high commitment results in a fall in inflation of roughly 3 percentage points after five years.

5. Transmission of commitment through expected inflation

Our finding that disinflationary efforts are more successful in episodes where the Federal Reserve's commitment to disinflation was stronger raises the question of what mechanism brings this about. One possibility is that stronger commitment lowers expected inflation among price- and wage-setters, thereby reducing the output costs of disinflation and increasing the probability of success. If this is an important transmission mechanism, it is likely that expected inflation would fall following public reports of strong monetary policymaker commitment to disinflation. This section examines some evidence about whether this occurs. Our main focus is on whether news about policymakers' commitment to lower inflation leads forecasts of inflation to fall. We also look at evidence from the Federal Reserve's current effort at disinflation, where there are high-frequency indicators of expected inflation, to investigate the immediate impact of news about commitment.

5.1. News reports of commitment in different episodes

What is relevant to the expectational mechanism is public perceptions of the Federal Reserve's commitment to disinflation, not what is shown by the later release of information about its internal deliberations. We therefore start by investigating the evidence from contemporaneous news reports about commitment in each episode. To have a consistent source across episodes, we conduct a search of the *New York Times* for relevant articles around the time of each shift to disinflationary policy. We then examine those articles to see what information they provided about the Federal Reserve's commitment to disinflation. In assessing the news on commitment, we look for indicators similar to those we investigated in reading the internal policy records. For example, do the news articles suggest there is a clear goal for inflation? Is the Federal Reserve described as being willing to accept large output losses to achieve its inflation goal? Are monetary policymakers described as believing they have the ability to reduce inflation on their own?

We find that across episodes, the strength of policymaker commitment to disinflation reported in the *New York Times* is broadly, but not perfectly, correlated with what we find in Section 3 about the strength of commitment revealed in internal policy records. Likewise, we find that within episodes, the timing of news about policymaker commitment to disinflation lines up well, but not perfectly, with the timing of evidence about commitment in internal documents. We also find that in some cases (such as the 1979 episode), the news is highly concentrated, while in others (such as 1981), it is somewhat spread out.

Based on news reports, we rank how committed to disinflation the public would have believed policymakers to be. Ordered from highest to lowest levels of perceived commitment, the episodes are August–October 1958, January–May 1981, October 1979, December 1968, January–March 1989, April 1974, August–October 1955, September 1978, and October 1947. Online Appendix C provides an episode-by-episode description of the newspaper evidence from each episode. Similar to what we do in Section 3, here we present condensed versions of two of those descriptions.

5.1.1. A publicly perceived high commitment episode

As discussed in Section 3, May 1981 is an episode where policymakers were highly committed to disinflationary policy. Based on the reports in the *New York Times*, the public would likely have perceived commitment as very high as well. However, the newspaper descriptions of high commitment appeared gradually rather than in a short, clearly defined period.

The first wave of reports of renewed policymaker commitment to disinflation came in late 1980 and early 1981. The *Times* reported that monetary policymakers "said that the lack of improvement in the prospects for curbing inflation had renewed their conviction that

⁸ For consistency with our earlier work, we use data for the period 1946Q4–2016Q4. However, the results are not literally identical to our earlier ones because we use recently revised inflation data.

⁹ Using the scaled dummy has only a minor impact on the regression for real GDP. The estimated maximum negative impact of a monetary shock with average commitment is about 10 percent smaller using the scaled dummy in place of the unscaled dummy. The estimated statistical significance of the effect is largely unchanged.

C.D. Romer and D.H. Romer

the Federal Reserve should maintain a tight monetary policy" (1/5/1981, p. A1).¹⁰ It also said, "The Federal Reserve's ever-tightening grip on the nation's monetary valves is a signal that the central bank is determined to squeeze the worst of inflation out of the economy—even if it produces a hair-curling recession next year" (12/14/1980, p. E5).

The second wave came in May and June 1981. A front-page story in early May cited one reason for the Federal Reserve's increase in the discount rate as being "to signal to the financial community that it will redouble its efforts to hold down growth of the money supply" (5/5/1981, p. A1). A week later, the *Times* reported, "the Federal Reserve Board is making a most aggressive effort to throttle growth of the money supply," and, "the Fed has indicated that it will now act more quickly and forcefully to control the money supply" (5/13/1981, p. D1). A later article quoted an analyst saying: "Forget about October '79. This is much tighter" (6/28/1981, p. F1).

5.1.2. A publicly perceived low commitment episode

An episode where policymakers' commitment to disinflation was low is August 1978. The news reports would have led the public to perceive little commitment in this episode as well. In the months before the policy shift, there were reports that the Federal Reserve might take strong steps to reduce inflation. For example, an editorial said that Chairman G. William Miller "has made it clear that if the White House does not lead the fight against inflation, the Fed will ... do the job in the only way it can—through tight money and high interest, meaning an induced recession" (4/3/1978, p. A22). But such discussions largely disappeared once policy actually shifted. One article early in the disinflationary attempt seemed to suggest significant commitment, reporting, "The Federal Reserve System apparently has adopted a 'get-tough' attitude to combat excessive money growth and inflation, a sharp change" from its previous "cautious, gradualistic approach," (9/25/1978, p. 36).¹¹ But much more typical were a report of Miller discussing various measures to deal with inflation with almost no mention of monetary policy (8/25/1978, p. 3); and an article reporting that "Miller was emphatic in rebutting suggestions that the American economy was headed for a deep depression or even a mild recession because of the present high level of interest rates," and that he said that "Government would be wise to try to keep real economic growth in a range of 3 to 4 percent a year for the next six years" (11/21/1978, p. D13).

5.2. Some evidence on the expectational mechanism

We now turn to the question of whether news reports of Federal Reserve commitment to disinflation are associated with falls in expected inflation.

5.2.1. Evidence from professional forecasts

The data on expected inflation that go back furthest are from surveys of forecasters, and so we focus on those. Since price- and wage-setters surely pay less attention than forecasters to monetary policy, using professional forecasts is more likely to work in the direction of overstating the strength of the expectational channel than understating it.

The only survey of forecasts available early in our sample period is the Livingston Survey, so we use that for the first three episodes. Thereafter, we use the Survey of Professional Forecasters (SPF). The inflation measure available from the Livingston Survey is the Consumer Price Index. The only price index consistently covered by the SPF is a price index for GDP (or GNP).

One drawback of the surveys is that the horizons are generally fairly short relative to the time frame over which the forecasters likely thought monetary policy could have a noticeable impact on inflation. We therefore focus on forecasters' expectation of inflation in the last time period covered by the survey. For the Livingston Survey, this is inflation over the 6 months starting 6 months after the date of the survey. For the SPF, it is generally inflation in the quarter 6 quarters after the date of the survey. Throughout, we look at the median forecast among the survey participants. For each episode, we look at the behavior of the resulting measure of expected inflation around the time of the main news of Federal Reserve commitment to reduce inflation.¹²

Fig. 5 presents the results. The month labeled zero on the horizontal axis of each panel is either the main month of public news (in episodes where the major reports came in a single month) or the midpoint of the period with the main news (in episodes where the major reports were dispersed). When the news came mainly in one month, the panel includes a solid vertical line at month zero; when it was dispersed, the panel includes dashed vertical lines at the months of the start and end of the main news. Since our interest is in the immediate impact of the reports, the horizontal axis of each panel extends from the last forecast before the start of the main news to the first forecast after its end.¹³

The results provide essentially no evidence that clear news of high commitment to reduce inflation lowers expected inflation. The only episode where expected inflation fell nontrivially around the time of widespread news of commitment was 1981. Importantly, there had been considerable attention to monetary policy since October 1979, unemployment had been over 7 percent since May 1980, and actual inflation was falling. Thus, while the publicly perceived high commitment to disinflation may have played a role in the fall in expected inflation, it is likely these other factors were also involved. Around the other two times with clear news reports of high

¹⁰ All citations in Section 5.1.1 are to the *New York Times*.

¹¹ As described in Online Appendix C, the *New York Times* is not available from August 10, 1978 to November 5, 1978, and so our source for those dates is the *Wall Street Journal*. The other citations in Section 5.1.2 are to the *New York Times*.

¹² The sources of the forecasts and the other data used in this section are given in Online Appendix A.

¹³ Note that because the change in forecasted inflation was so large in the 1947 episode, the vertical scale of panel (a) of the figure differs from the others. Also, as described in online Appendix C, there were essentially no public reports about commitment to disinflation in this episode. Thus, the choice of October 1947 (the month where we date the policy shock) as month zero is somewhat arbitrary.



Fig. 5. Behavior of expected inflation following disinflationary monetary policy shocks.

Notes: Each panel shows the behavior of the median forecast of inflation at the longest forecast horizon around the times of the clearest news of Federal Reserve commitment to disinflation in each episode. Solid vertical lines show the month of the clearest news in the episodes where the news was concentrated; dashed vertical lines show the first and last month of the clearest news in the episodes where the news was dispersed. Month 0 is the month of the clearest news, or the midpoint of the interval of the clearest news. Data for panels (a)-(c) are from the Livingston survey; data for panels (d)-(i) are from the Survey of Professional Forecasters. See Online Appendix A for data details.

commitment to disinflation (1958 and 1979), expected inflation rose, and it was essentially unchanged or rose slightly in all the remaining episodes.

5.2.2. High-frequency evidence from the recent episode

As we discuss in Section 7, the Federal Reserve embarked on a tenth episode of attempted deliberate disinflation in 2022. The presence of markets for inflation-indexed securities allows us to use a high-frequency approach to examine the link between reports of monetary policymakers' commitment to disinflation and expected inflation in this episode. The basic idea is to look for the days with news articles providing clear new evidence of commitment, and then examine the behavior of expected inflation as measured by financial markets on those days. The hypothesis that commitment to disinflation reduces inflation through its impact on expectations predicts that expected inflation will fall on those days.

We proceed in three steps. The first is to identify days when there was substantial new information about the path of monetary policy. Specifically, we consider days in the recent episode when the nominal 2-year Treasury rate rose by at least 8 basis points. Our exact sample period is June 16, 2021 (the date when the 2-year rate first rose above 0.2 percent) to November 7, 2022 (when the 2-year rate reached a local peak, by which time—as we describe in Section 7—the Federal Reserve had made its commitment clear). There are 43 days in this period when the 2-year rate rose by 8 basis points or more.

The second step is to find the subset of those days when the main reason for the increase was new public information about monetary policymakers' commitment to reduce inflation. To do this, we rely on contemporaneous news accounts of the reasons for the increases. We look for days when the descriptions satisfy three criteria: the increase was attributed primarily to Federal Reserve commitment (rather than, for example, to unfavorable news about inflation); no significant other reason for the increase was given; and ideally, the description reported actual new information about commitment. We first look at the *New York Times*; then, except in cases where that clearly rules out a day, we look at the *Wall Street Journal*.

This approach leads us to identify seven days that unambiguously meet our criteria: two days of FOMC meetings, two with other statements by Chair Jerome Powell, one with a release of FOMC minutes, one with a speech by another Governor, and the day when it was announced that Powell would be renominated. Five additional days largely meet our criteria but are less clear-cut. These are days where the increase was attributed to market participants reassessing the FOMC's commitment but without a precise source of new information being described; most often, the developments were characterized as reassessments of recent news concerning monetary policy. Given the small number of days that meet our criteria, we consider both a narrow sample of the seven days that clearly meet our criteria, and a broader sample that includes the five additional days. Online Appendix D describes the evidence that leads us to identify these twelve days, as well as examples of the evidence that leads us to exclude the other days with large rises in the 2-year rate.

The third step is to examine the behavior of expected inflation on those days. We use two standard market-based measures of inflation expectations implied by the spread between the rates on nominal and inflation-protected securities: the 5-year breakeven inflation rate and the 5-year, 5-year forward expected inflation rate.

Table 2 shows the results. They suggest no consistent pattern. In response to new information about the Federal Reserve's commitment to disinflation, market-based measures of expected inflation sometimes rose and sometimes fell, medium-term and long-term measures of expected inflation often behaved very differently, and the responses were sometimes large and sometimes small.¹⁴

As a simple summary, we regress the change in expected inflation on the change in the 2-year rate on these days. Because the change in expected inflation is likely to be roughly proportional to the news about monetary policy (and relatedly, because there is no reason for expected inflation to move systematically in either direction if the 2-year rate does not change), we do not include a constant term. We consider both measures of expected inflation and both the 7-day and 12-day samples. Thus, we estimate four simple regressions.

For the narrow sample, the coefficient on the change in the 2-year rate is -0.10 (with a standard error of 0.14) for expected inflation over the next 5 years, and 0.20 (0.26) for expected inflation over the 5 years starting 5 years ahead. For the broader sample, the estimates are -0.14 (0.11) for medium-term expected inflation, and 0.02 (0.15) for longer-term expected inflation.

5.2.3. Discussion

Our results provide no support for the hypothesis that perceived commitment to disinflation in an episode helps to bring about disinflation by directly reducing expected inflation. Professional inflation forecasts show no systematic tendency to fall around the times of the reports of strong Federal Reserve commitment in the episodes we study. In addition, in high-frequency data, the hypothesis of no relationship between the change in expected inflation and new information about commitment is not remotely close to being rejected; and when we consider only the days with the clearest news, the point estimate is wrong-signed and substantial for one of the two measures of expected inflation.

Of course, this evidence does not prove that beliefs about Federal Reserve commitment are not important to expected inflation. One issue is that our tests are not strong. As noted above, the horizons of the professional forecasts are relatively short, and forecasters may have reasonably believed that current and future monetary policy changes would have essentially no impact on inflation over those horizons. And because so few days meet our criteria for the high-frequency test, the estimates using those data are imprecise.

The second issue is that the near-term and long-term effects of commitment may differ. As suggested by work on the "Federal Reserve information effect" by Romer and Romer (2000), Nakamura and Steinsson (2018), and others, forecasters and market

 $^{^{14}}$ The articles in the *Times* and the *Journal* do not provide any explanations of the observations in Table 2 that seem most surprising, such as the large rise in 5-year, 5-year forward expected inflation on 4/21/2022.

Table 2

Response of expected inflation to news about commitment.

Date	Change in 2-year rate (basis points)	Change in 5-year breakeven inflation (basis points)	Change in forward breakeven inflation (basis points)	News
Core observations				
3/21/2022	17	4	4	Powell speech
7/6/2022	15	$^{-3}$	1	Release of Minutes
11/22/2021	11	-4	-4	Powell renomination
1/26/2022	11	$^{-3}$	-3	FOMC decision, press con
3/16/2022	10	-8	0	FOMC decision, press con
4/21/2022	8	1	19	Powell remarks
4/5/2022	8	3	5	Brainard speech
Marginal observation	15			
6/13/2022	34	-2	-2	
11/3/2022	10	-14	-12	
9/22/2022	9	-2	8	
9/15/2022	9	-5	-1	
10/6/2022	8	3	-3	

Notes: See Online Appendix A for data sources, and the text for details of the calculations.

participants may view expressions of commitment by monetary policymakers as conveying information not just about their objectives, but also about the amount of tightening needed to achieve a given objective. Consistent with this, newspaper reports of monetary policymakers' views about disinflation generally do not sharply distinguish information about their objectives from information about their assessments of the challenges they faced. Consider, for example, a quote from an analyst saying "the Fed upgraded the inflation problem to a five alarm fire" (*Wall Street Journal*, 7/7/2022, p. A.1), or an article quoting Powell saying, "We're not going to let high inflation become entrenched" (*New York Times*, 3/17/2022, p. A.1). Although both are most naturally read as statements about the importance monetary policymakers attach to addressing inflation, they could be interpreted partly as statements about how problematic policymakers think the inflation outlook is. As a result, expressions of commitment to disinflation could leave expectations of inflation unchanged or cause them to rise.

Importantly, even if this mechanism leads to an absence of short-term relationship, a general belief that the Federal Reserve is committed to low inflation could cause expected inflation to remain anchored in the face of shocks. In this scenario, expressions of commitment to disinflation during an episode could have little benefit—consistent with our evidence. But a general reputation for commitment to low inflation going into an episode could mute any rise in expected inflation in response to increases in inflation, and so lower the costs of reducing it—consistent with the evidence of the importance of anchored expectations (for example, Gürkaynak et al., 2010). Since commitment going into an episode is likely the result of a track record of keeping inflation low and acting forcefully to reduce it when it rose, in this view it would be not monetary policymakers' current commitment to disinflation, but their past commitment to low inflation, that reduced the costs of disinflation. And the fact that actual price- and wage-setters likely pay little attention to monetary policymakers' declarations of commitment, but are at least broadly aware of past inflation performance, would reinforce the importance of past relative to current commitment in determining the behavior of inflation.

6. Transmission of commitment through policy actions

This section examines a second potential mechanism through which greater commitment in an episode leads to more successful disinflation: greater commitment to disinflation may cause monetary policymakers to persevere in their anti-inflationary policies until they have more fully achieved their objectives.

6.1. The ends of disinflationary episodes

The first step in investigating this mechanism is to determine when and why monetary policymakers stopped pursuing disinflationary policies in each episode. To do this, we again use the detailed records of FOMC meetings, as well as the speeches and testimony of the Federal Reserve Chair. We use several criteria to identify the ends of disinflationary efforts. The most straightforward is whether policymakers explicitly said that some development—either another concern, such as a sharply contracting economy or severe strains in the financial system, or success in achieving their objective with regard to inflation—made it appropriate to deemphasize inflation reduction. Another possible criterion is that policymakers described inflation as rising or failing to fall, but did not respond. More broadly, we look for the discussion of policy no longer being framed mainly in terms of how to lower inflation. We also look at the behavior of the federal funds rate (or, in the initial episodes, the 3-month Treasury bill rate) as a supplement to the narrative evidence. For example, a constant or rising funds rate in the face of a weakening economy would suggest continuing active pursuit of disinflation; a sharp shift from a rising to a falling funds rate would be consistent with the end of the policy.

In determining *why* policymakers ended their disinflationary efforts, the first question is whether they believed they had achieved their inflation objective. If the answer is yes, the motivation for stopping is clear. If the answer is no, we examine the record to see what arguments were put forward for not continuing to actively try to reduce inflation, or what considerations other than a desire to reduce inflation appeared to be driving policy.

Table 3

The ends of disinflationary episodes.

Shock date	Commitment to disinflation	Effective end date	Duration	Achieved inflation goal?
October 1947	Medium (mixed)	March 1949	17 mos.	Yes
August 1955	Medium	April 1956	8 mos.	No
September 1958	High	March 1960	18 mos.	Yes
December 1968	Low to medium	January 1970	13 mos.	No
April 1974	Low to medium	October 1974	6 mos.	No
August 1978	Low	March 1979	7 mos.	No
October 1979	Medium to high	May 1980	7 mos.	No
May 1981	High	July 1982	14 mos.	Largely
December 1988	Medium	July 1989	7 mos.	Largely

Notes: The dates of disinflationary shocks are from Romer and Romer (2023). Online Appendix E describes the narrative evidence behind our identification of the effective end dates of the disinflationary episodes and whether policymakers believed they had achieved their inflation goal.

Online Appendix E presents episode-by-episode analyses of when the disinflationary episodes ended and the reasons policymakers ended them. Although the shifts away from active disinflationary policies often did not occur all at once, they all took place over relatively short periods. For simplicity, we therefore date the shifts to specific months; in cases where the exact month is not obvious, we select the first month where it is clear policy had changed. The resulting dates are presented in Table 3.

6.2. Commitment and the ends of disinflationary episodes

Armed with the information about when disinflationary policy was ended, we can look at the relationship between strength of the commitment to disinflation and the outcomes of disinflationary attempts. To this end, Table 3 also repeats our summary assessments of the strength of policymakers' commitment to disinflation at the outset of the episodes, and reports whether they had achieved their inflation objective when they stopped pursuing disinflation. As the table shows (and as we explain more below), in some cases success is not well summarized by a simple 0–1 variable.

The table shows a clear correlation between the strength of monetary policymakers' commitment at the start of attempts at disinflation and the length of time they actively pursued disinflation. Most notably, the two episodes with the strongest starting commitment (1958 and 1981) are two of the three episodes where policymakers remained focused on disinflation the longest.

More importantly, we show in Online Appendix E that episodes of high or medium commitment to disinflation were much more likely to be ended because the inflation goal had been achieved; episodes of low commitment universally ended prematurely. The 1947 (medium commitment) and 1958 (high commitment) disinflationary episodes were ended because inflation had been thoroughly reduced. At the FOMC meeting of February 28 and March 1, 1949, when the FOMC decided to move away from the anti-inflationary policy it had embarked on in October 1947, the Committee's Economist "referred especially to recent declines in prices" (*Minutes*, 2/28/1949, p. 4); and FOMC Vice Chairman Allan Sproul saw the most likely path for the economy as intermediate between "a temporary hesitation with inflationary pressures being resumed later in the spring" and "the beginning of a downward spiral of deflation," implying that inflationary policy, FOMC Vice Chairman Alfred Hayes stated: "Price developments ... have been rather satisfactory," and referred to the possible "emergence of some less fatalistic views with respect to creeping inflation" (*Minutes*, 3/1/1960, p. 31). He continued: "Consumer and wholesale price indices have been generally stable, and sensitive prices have tended to decline" (p. 31).

In the 1981 (high commitment) and 1988 (medium commitment) episodes, inflation had been reduced substantially, but not all the way to policymakers' goal. In his Humphrey-Hawkins testimony in July 1982, the month in which we date the end of the active disinflation policy that started in May 1981, Chairman Paul Volcker said: "In these past two years we have traveled a considerable way toward reversing the inflationary trend of the previous decade or more," and "In fact, the evidence now seems to me strong that the inflationary tide has turned in a fundamental way" (Volcker testimony, 7/20/1982, pp. 1 and 2). Similarly, at the time of the shift away from anti-inflationary policy in July 1989, Chairman Alan Greenspan, who was the driving force behind the policy shift, believed there had been considerable progress in addressing inflation. This was clearest in the two conference calls that preceded the July meeting. In late May, he referred to "a degree of softness, especially on the price side" (*Transcript*, 5/31/1989, p. 1). And in early June, he described "what was beginning to emerge very clearly as a significant defusing of inflationary pressures. Increasingly, as I look at commodity prices, and especially wages, I would be inclined to request [some easing]" (*Transcript*, 6/5/1989, p. 2).

Online Appendix E shows that in the remaining episodes—1955, 1968, 1974, 1978, and 1979—policymakers stopped prematurely. In April 1956, as the FOMC began to back off from its 1955 (medium commitment) policy of trying to eliminate inflation, the Associate Economist reporting on the business situation said, "At mid-April, the average [of industrial prices] was 5 per cent above the average for the first half of last year" (*Minutes*, 4/17/1956, p. 4). FOMC Vice Chairman Alfred Hayes said in August, "The sizeable increases in steel workers' wages and steel prices are likely to start a chain reaction in other industries. Already there is some evidence that this is taking place. … Prices in many areas seem to confirm a tendency for effective demand to outrun available resources." (*Minutes*, 8/7/1956, p. 9). In January 1970, which is when we date the move away from the active disinflationary policy that began in December 1968 (a low commitment episode), the Committee's Economist reported, "Pressures on costs and prices remain intense" (*Minutes*, 1/15/1970, p. 34). Likewise, the Open Market Manager reported: "with unemployment continuing at a low level and prices continuing to rise, there were few in the market who seemed to feel that the anti-inflationary program was really beginning to bite" (p. 24). In October 1974, when monetary policymakers were ending the disinflationary policy they had begun just 6 months earlier (a low

commitment episode), Chairman Arthur Burns said that "inflation was continuing at a two-digit rate. It remained a serious worldwide problem that threatened not only the economic system but social and political institutions as well" (*Minutes*, 10/14–15/1974, p. 61). And the Committee's Senior Economist said, "the outlook for inflation also remains distressingly poor" (p. 28).

The final two episodes where we find premature easing are the 1978 (low commitment) and 1979 (high commitment) attempts at disinflation, though in both cases monetary policymakers returned to a focus on disinflation relatively quickly. In March 1979, when the FOMC moved away from the disinflationary path it had embarked on the previous August, there was widespread agreement that the Committee had made little (or perhaps negative) progress toward its inflation goals. For example, one staff member said "near-term inflation prospects are dismal" (Presentation materials, 3/20/1979, Kichline, p. 1); and FOMC Vice Chairman Paul Volcker said: "One doesn't have to speculate to see that inflation is a lot worse" (*Transcript*, 3/20/1979, p. 10). And in May 1980, the month in which the FOMC pivoted away from the disinflationary policy it had embarked on in October 1979, one Governor commented, "I don't think we can seriously say that we're out of the woods on inflation" (*Transcript*, 5/20/1980, p. 24); another said, "I'm still very much worried about inflation" (p. 25); and a third participant remarked, "inflation certainly is still a problem" (p. 25).

This division demonstrates a strong, but not perfect, correlation between the strength of commitment at the outset of disinflationary episodes and avoiding premature stopping. In the two episodes with the strongest initial commitment (1958 and 1981), monetary policymakers saw their efforts through to completion or near completion. And in the three with the weakest commitment (1968, 1974, and 1978), they eased prematurely. Thus, there appears to be an important link between monetary policymakers' initial commitment and their perseverance.¹⁵

6.3. Motivation for premature stopping and the link to commitment

The narrative record provides important insight into why monetary policymakers often abandoned disinflationary policy before they had achieved their inflation goals. The motivations for the premature end to active disinflationary policy in each episode are discussed in Online Appendix E. In this section, we summarize those motivations and discuss their links to the initial commitment to disinflation monetary policymakers displayed.

6.3.1. Monetary policy had done its part

One reason policymakers sometimes gave for easing before inflation had been reduced was that monetary policy had done all it could, or at least had done its part, and now it was time for other policies and actors to step up. This was clearly the case in the 1955 episode, where we identify the end of active disinflationary policy in April 1956. In June 1956, one Governor "felt that the System had accomplished to a large extent what it set out to accomplish: it had awakened the economy to the dangers of inflation. Now the System could afford to coast along and not make conditions any tighter" (*Minutes*, 6/5/1956, pp. 17–18). Likewise, Chairman William McChesney Martin said that "against the Juggernaut of Government spending, and against the Juggernaut of inflationary prices, it [the FOMC] should not persuade itself that monetary and credit policy will be successful in halting what is occurring" (*Minutes*, 9/11/1956, p. 35).

Related views were expressed in both the 1968 and 1978 episodes. In the 1968 episode, the Federal Reserve staff and monetary policymakers believed they had successfully reduced aggregate demand; if inflation did not fall, there was nothing more monetary policy could do. In the 1978 episode, policymakers expressed skepticism whether the kind of inflation the country was experiencing would respond to further demand contraction.

There is a strong link between our measure of commitment to disinflation and this motivation for premature stopping. One way we identify low commitment is by whether monetary policymakers thought inflation was their problem to solve and whether they thought they could deal with inflation on their own. In all three of the episodes where a belief that monetary policy had done its part contributed to the end of active disinflationary efforts, policymakers had indicated at the beginning of the disinflationary attempt that they thought monetary policy was inherently limited. Thus, it is not surprising that we find low commitment, as revealed in part by this belief, is correlated with stopping disinflationary policy before inflation had actually been reduced.

6.3.2. Acceptable output costs had been surpassed

By far the most frequent motivation for the abandonment of disinflationary policy before inflation had been reduced involved the output costs of disinflation surpassing tolerable levels. This motivation again maps closely to our measure of commitment. A key criterion we use for identifying high commitment is that policymakers were willing to accept large output losses to achieve disinflation. Lower commitment was often revealed by policymakers putting strict limits on the output losses they were willing to accept. Thus, a natural way for low commitment to lead to failed disinflation is by causing policymakers to ease as soon as relatively small output costs were reached.

¹⁵ The 1947 episode, in addition to being one that did not feature premature easing, is the episode other than 1958 and 1981 where policymakers remained focused on disinflation the longest. However, as described in Online Appendixes B and E, the 1947 episode is the least comparable to the other episodes, and is better described as having mixed rather than medium commitment. On most dimensions, policymakers' commitment was strong, but because of the institutional arrangements of the time, they had significant doubts about whether their tools would be enough to accomplish their objective. Given their strong desire to reduce inflation, it is not surprising that they pursued disinflation for a long time and did not stop until their objective had been achieved. But the unique features of this episode mean that it is not very useful for providing evidence about the general link between commitment and perseverance.

This motivation and linkage to commitment were particularly important in the three low commitment episodes we identify. The 1968 disinflationary policy was weakened greatly in January 1970. At the FOMC meeting that month, one Reserve Bank President explained that: "Thus far, the figures suggested that the correction would be modest in amplitude—not of true recession proportions. Nonetheless, he thought it was important that the change in the economic climate be reflected promptly in at least a modest change in policy orientation" (*Minutes*, 1/15/1970, p. 50). Another said that continuing with disinflationary policy would "be too risky" (p. 66). In 1974, one quite hawkish Reserve Bank President said the FOMC had been aiming to dampen demand, but "the problem in the period ahead was to halt the decline in activity before it became too deep" (*Minutes*, 10/14–15/1974, p. 43). Similarly, in the 1978 episode, one Bank President said: "If it's our objective to avoid a recession, I think we have to move today; I don't think we can wait for another month" (*Transcript*, 3/20/1979, p. 21). That policymakers stopped before output fell noticeably in these three episodes is consistent with the fact that they had expressed tolerance for only small output losses as the start of the disinflation.

We categorize policymakers' commitment to disinflation as only moderate in the 1988 episode in part because they again put clear limits on the acceptable output losses. Active disinflationary policy was ended in roughly July 1989 because the output losses threatened to be larger than the FOMC felt were acceptable. One Governor said at the July FOMC meeting: "I've been sitting here thinking that I need a new hearing aid because I can't believe the change in the comments today versus the FOMC meeting in May or, for sure, the one in March. ... Anyway, as you know, I've been somewhat concerned about the slowing economy for a fair while. So, it is nice to have some other people who are on board with the same concerns" (*Transcript*, 7/5–6/1989, p. 30). In his Humphrey-Hawkins testimony that month, Chairman Alan Greenspan said: "But now signs of softness in the economy have shown up. Accordingly, it is prudent for the Federal Reserve to recognize the risk that such softness conceivably could cumulate and deepen, resulting in a substantial downturn in activity. ... [W]hat we seek to avoid is an unnecessary and destructive recession" (Greenspan testimony, 7/20/1989, pp. 15–16). Thus, this episode, too, shows a link between limited commitment and early easing, working through output losses reaching an unacceptable level.

Output loss going above the initially described tolerable level also explains why even some more committed disinflations were stopped. We score both the 1979 and 1981 Volcker-era disinflationary shocks as highly committed, in large part because monetary policymakers appeared willing to accept substantial output losses. Both policies were nevertheless stopped before policymakers were fully satisfied with the inflation rate because the output losses were very large. In May 1980, when policymakers backed off the 1979 disinflationary policy, one Governor said: "And if that's the situation, that is a classic depression situation developing in the economy. The worst possible thing that could happen would be to continue to see credit and money contract because that would perpetuate and deepen the decline" (*Transcript*, 5/20/1980, p. 16). Chairman Paul Volcker said: "The obvious risk is the presence of recession, and when that [occurs] one always has the feeling of being in a bottomless period. Indeed, there is a certain degree of risk that we are in a more bottomless period than we would expect or like to be in" (p. 28, bracketed material in the original). Likewise, in May 1982, just shortly before the end of the second episode of active disinflationary policy in July 1982, one Governor said: "We are looking at an economy that the latest Redbook suggests is teetering on the brink of going over the edge. Attitudes are very, very pessimistic" (*Transcript*, 5/18/1982, p. 5). And in October 1982, Volcker said: "We haven't had a parallel to this situation historically except to the extent 1929 was a parallel" (*Transcript*, 10/5/1982, p. 19). When policymakers were highly committed to disinflation, it took the risk of another Great Depression to get them to loosen.

6.3.3. Fiscal policy would fill the gap

A third motive for loosening monetary policy before inflation was reduced was concern that if monetary policymakers did not relax monetary restraint in the face of economic weakness, fiscal policymakers would move to fill the gap. Federal Reserve policymakers feared that this alternative would worsen inflation prospects and cause long-run fiscal imbalances.

The episode where this view held the most sway was the 1974 disinflation. A clear statement of the "fear of fiscal" motivation came from the FOMC's Senior Economist, who said: "It does seem clear, however, that the additional weakness that appears now to be developing in the economy is counter-productive. It will create strong demands for remedial action but will serve little purpose in further dampening inflationary forces" (*Minutes*, 10/14–15/1974, p. 28). Very similarly, one Reserve Bank President said that "he believed that monetary policy had to be formulated on the assumption that the deeper the recession proved to be, the greater were the probabilities that Government policies adopted to combat it would produce too sharp a recovery" (p. 69).

This motivation for premature easing also arose in both the 1968 and 1978 episodes. In January 1970, which is when we date the end of the 1968 attempted disinflation, one Reserve Bank President said that: "He would expect budgetary control to be abandoned immediately if the Congress and the Administration were to decide that the country was in a recession. ... It was for that reason that he believed a mildly restrictive monetary policy would contribute more to the creation of an environment for fiscal sobriety than the present severely restrictive policy" (*Minutes*, 1/15/1970, p. 51). In the 1978 episode, the view was expressed clearly by a Bank President, who said: "And as a matter of political reality, if the recession is more serious than it otherwise might be, I think the political system is such that we're likely to have the kind of fiscal policy fallout that will aggravate inflation rather than help" (*Transcript*, 4/17/ 1979, p. 13). This motivation for stepping back from disinflationary policy was also cited by Chairman G. William Miller in a speech (Miller speech, 5/1/1979, p. 7):

Finally, in monetary policy, we've been endeavoring to accomplish this [dampening of inflationary forces] without throwing the economy into a serious tailspin, into a serious recession. Such a recession would automatically result in increased Federal deficits, would automatically result in pressures for additional Federal spending and would automatically result in increased bias toward inflation which would start us off on a new treadmill and a new cycle the next time around.

One cannot help but notice that the three episodes in which we see the fear of expansionary fiscal policy cited as a motivation for curtailing disinflationary policy were the three with the lowest commitment to disinflation. It could be that monetary policymakers in

these episodes were simply looking for a reason not to carry through with their disinflationary policy, and the political argument was convenient. More likely, the same forces that led monetary policymakers to put strict limits on the acceptable output losses in these episodes led them to assume that fiscal policymakers would behave in the same way. In either case, low commitment to disinflation caused monetary policymakers to move away from disinflationary policies before inflation was reduced.

In sum, this analysis of why monetary policymakers sometimes weakened or ended disinflationary policy before inflation was successfully reduced suggests a key role for the level of commitment. The same views that indicate low commitment ex ante are also the views that led policymakers to stop contractionary policy prematurely. Thus, a key mechanism by which commitment affects ultimate success is through the willingness of policymakers to stick with contractionary policy until disinflation is achieved.

7. Concluding comments and implications for today

On multiple occasions in the decades since World War II, the Federal Reserve has made serious attempts to reduce inflation. The inflation outcomes have varied widely, with the declines ranging from small and short-lived to substantial and persistent. In this paper, we show that the variation in monetary policymakers' commitment to reduce inflation at the start of their disinflationary attempts—as indicated by their willingness to incur output costs, the clarity of their objective, the strength of their belief that monetary policy has the power and responsibility to control inflation, their willingness to embrace a "whatever it takes" approach, and whether they viewed themselves as going beyond earlier efforts—has been a critical source of the variation in outcomes. When the Federal Reserve was strongly committed to lowering inflation, it generally succeeded; when it was weakly committed, it generally failed.

We find no support for the hypothesis that stronger commitment to disinflation in an episode reduces inflation by directly lowering expected inflation. Rather, greater commitment leads to success through its impact on the strength and persistence of the disinflationary policy. When commitment was strong, monetary policymakers generally persisted in their efforts until they had largely achieved their inflation objective. When it was weak, a mix of concern about the output costs, a belief that they had done their part, and a fear that failure to ease would lead to fiscal expansion, led them to ease too soon to achieve their objectives.

In 2022, the Federal Reserve embarked on another disinflationary attempt. The *Transcripts* of the 2022 FOMC meetings, which we believe are the single best source for determining monetary policymakers' intent and commitment, will not be available until 2028. Thus, it is too soon for a definitive assessment. But there is enough evidence from other sources to permit some tentative judgments. Two especially useful sources are the brief published "Minutes" of FOMC meetings (U.S. Board of Governors of the Federal Reserve System 2022a), and the transcripts of Chair Jerome Powell's press conferences (U.S. Board of Governors of the Federal Reserve System 2022b).¹⁶

To start with, as described in Romer and Romer (2023), it appears that by roughly July 2022, monetary policymakers were willing to accept substantial output costs to bring inflation down and were taking actions to bring that about—as opposed to, for example, vaguely expressing hope that inflation would fall or that policy actions could bring it down almost painlessly. Thus, this period appears to qualify as the tenth postwar disinflationary attempt by the Federal Reserve.

As of this writing (June 2024), inflation has fallen substantially but remains above the Federal Reserve's target. The evidence in this paper implies that whether inflation falls the rest of the way depends crucially on how committed monetary policymakers were when they embarked on their disinflationary efforts. This immediately raises the question of how strong that commitment was.

The bulk of the evidence points to strong commitment. First, there was a very clear and concrete objective. In the "Minutes" of FOMC meetings and Powell's speeches and post-meeting press conferences, the phrases "2 percent objective," "2 percent target," and "2 percent goal" came up over and over. Moreover, the Federal Reserve specified exactly what inflation measure it would use to judge whether it had achieved this objective.

Second, monetary policymakers clearly viewed achieving that objective as their responsibility and within their control. For example, in a speech in March 2022, Powell said simply, "The ultimate responsibility for price stability rests with the Federal Reserve" (Powell speech, 3/21/2022, p. 9). He began multiple press conferences with statements along the lines of, "We have both the tools we need and the resolve it will take to restore price stability" (Press conference, 7/27/2022, p. 1). When he was asked at a Congressional hearing in June 2022 whether the Federal Reserve's commitment to tackle inflation would be limited by the high level of the Federal debt, he replied simply, "No, absolutely not" (U.S. House of Representatives Committee on Financial Services, 2022, p. 17). In a speech in August that was intended as a forceful overview of the Federal Reserve's disinflationary policy, after noting that "the current high inflation is a global phenomenon" and that "the current high inflation in the United States is the product of strong demand and constrained supply, and ... the Fed's tools work principally on aggregate demand," he continued: "None of this diminishes the Federal Reserve's responsibility to carry out our assigned task of achieving price stability" (Powell speech, 8/26/2022, p. 3).

Third, monetary policymakers said repeatedly that they were determined to persevere regardless of obstacles. In his August speech, Powell said, "Our responsibility to deliver price stability is unconditional" (Powell speech, 8/26/2022, p. 3). The "Minutes" of the September FOMC meeting reported: "Participants reaffirmed their strong commitment to returning inflation to the Committee's 2 percent objective, with many stressing the importance of staying on this course even as the labor market slowed" ("Minutes," 9/20–21/ 2022, p. 9). The "Minutes" also referred to "a couple of … participants stressing that historical experience demonstrated the danger of prematurely ending periods of tight monetary policy designed to bring down inflation" (p. 10). And in his August speech, Powell said,

¹⁶ The documents we identify as the "Minutes" are the shorter summaries of FOMC meeting discussions made public roughly three weeks following each FOMC meeting. These are similar to what in the past was called the "Record of Policy Actions." These "Minutes" are much shorter and less detailed than the historical *Minutes* and *Transcripts* we use in the rest of the narrative analysis.

C.D. Romer and D.H. Romer

"Restoring price stability will likely require maintaining a restrictive policy stance for some time. The historical record cautions strongly against prematurely loosening policy" (Powell speech, 8/26/2022, p. 2). He ended the speech by saying, "We will keep at it until we are confident the job is done" (p. 5).

Two aspects of the Federal Reserve's commitment in 2022 appear somewhat less strong. Most obviously, since more than three decades had passed since the previous disinflationary episode, the effort was in no sense a second try. More importantly, monetary policymakers' statements about the extent of the output costs they expected to bear, though significant, were somewhat moderate. There were only a few indications of a willingness to accept or risk a recession. The "Minutes" of the November 2022 meeting reported, "The staff ... viewed the possibility that the economy would enter a recession sometime over the next year as almost as likely as the baseline" ("Minutes," 11/1–2/2022, p. 6). And in December, Powell said, "I don't think anyone knows whether we're going to have a recession or not and, if we do, whether it's going to be a deep one or not" (Press conference, 12/14/2022, p. 17). But such statements were unusual. The path policymakers described as the modal outcome was far short of a recession, particularly with regard to the labor market. For example, in July 2022 Powell said merely that returning inflation to 2 percent was "likely to involve a period of below-trend economic growth," and, "We think that there's a path for us to be able to bring inflation down while sustaining a strong labor market, ... along with—in all likelihood—some, some softening in labor market conditions" (Press conference, 7/27/2022, p. 4 and 11). Similarly, in September, he described the FOMC participants' projections as involving "a relatively modest increase in the unemployment rate from a historical perspective, given the expected decline in inflation" (Press conference, 9/21/2022, p. 7).

Nonetheless, the overall weight of the currently available evidence points to the Federal Reserve being strongly committed to reducing inflation—similar to its commitment in the 1958, 1979, and 1981 episodes. We cannot rule out the possibility of a major financial, fiscal, or geopolitical crisis or of political or institutional upheaval that will make history a poor guide to the current episode. But based on history, the most likely outcome of today's attempt at disinflation is that monetary policymakers will persevere in their disinflationary efforts until they have brought inflation down to, or very close to, their long-run target.

Transparency declaration

The National Bureau of Economic Research has provided financial sponsorship to make this article open access and had no influence or involvement over the review or approval of any content.

Data availability

Data will be made available on request.

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.jmoneco.2024.103654.

References

Caplan, B., 1956. A case study: The 1948–1949 recession. In: Policies to Combat Depression. Prepared by the Universities-National Bureau Committee for Economic Research. National Bureau of Economic Research, New York, pp. 27–58.

Evans, P., 1982. The effects of general price controls in the United States during World War II. J. Polit. Econ. 90 (5), 944–966.

Federal Reserve Bank of St. Louis, 1946-2022. Federal Reserve archival system for economic research (FRASER), https://fraser.stlouisfed.org/.

Ginsburg, D., 1952. Price stabilization, 1950-1952: Retrospect and prospect. Univ. PA Law Rev. 100 (4), 514-543.

- Gürkaynak, R.S., Levin, A., Swanson, E., 2010. Does inflation targeting anchor long-run inflation expectations? Evidence from the U.S., UK, and Sweden. J. Eur. Econ. Assoc. 8 (6), 1208–1242. https://academic.oup.com/jeea/article-abstract/8/6/1208/2295943.
- Nakamura, E., Steinsson, J., 2018. High-frequency identification of monetary non-neutrality: The information effect. Q. J. Econ. 133 (3), 1283–1330.
- Nelson, E., 2005. The Great Inflation of the 1970s: What really happened? Adv. Macroeconomics 5 (1). Article 3.
- New York Times. Various issues.
- Primiceri, G.E., 2006. Why inflation rose and fell: Policy-makers' beliefs and U.S. postwar stabilization policy. Q. J. Econ. 121 (3), 867-901.
- Rockoff, H., 1984. Drastic Measures: A History of Wage and Price Controls in the United States. Cambridge University Press, Cambridge.

Romer, C.D., Romer, D.H., 2000. Federal Reserve information and the behavior of interest rates. Am. Econ. Rev. 90 (3), 429-457.

- Romer, C.D., Romer, D.H., 2002. The evolution of economic understanding and postwar stabilization policy. In: Rethinking Stabilization Policy. Federal Reserve Bank of Kansas City, Kansas City, pp. 11–78. https://www.kansascityfed.org/Jackson%20Hole/documents/3452/pdf-S02RomerandRomer.pdf.
- Romer, C.D., Romer, D.H., 2023. Presidential address: Does monetary policy matter? The narrative approach after 35 years. Am. Econ. Rev. 113 (6), 1395–1423. https://www.aeaweb.org/articles?id=10.1257/aer.113.6.1395.

Rouse, C., Zhang, J., Tedeschi, E., 2021. Historical parallels to today's inflationary episode. Council of Economic Advisers blog post, July 6.

- U.S. Board of Governors of the Federal Reserve System, 1946–1967. Minutes of Federal Open Market Committee. https://www.federalreserve.gov/monetarypolicy/
- fomc_historical.htm.
 U.S. Board of Governors of the Federal Reserve System, 1967–1976. Memoranda of Discussion of the Federal Open Market Committee, https://www.federalreserve.
 gov/monetarypolicy/fomc historical.htm.
- U.S. Board of Governors of the Federal Reserve System, 1976–2016. Transcripts of the Federal Open Market Committee. https://www.federalreserve.gov/ monetarypolicy/fome historical.htm.
- U.S. Board of Governors of the Federal Reserve System, 2022a. Minutes of the Federal Open Market Committee, https://www.federalreserve.gov/monetarypolicy/ fomc.htm.
- U.S. Board of Governors of the Federal Reserve System, 2022b. Press conference transcripts, https://www.federalreserve.gov/monetarypolicy/fomc.htm.
- U.S. House of Representatives Committee on Financial Services, 2022. Monetary policy and the state of the economy. June 23.
- Wall Street Journal. Various issues.

Whiteman, C.H., 1978. A new investigation of the impact of wage and price controls. Federal Reserve Bank Minneapolis Q. Rev. 2 (2), 2-8.