LESSONS FROM HISTORY FOR SUCCESSFUL DISINFLATION

Christina D. Romer and David H. Romer

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(ASPIRATIONAL) ABSTRACT

This paper examines what we can learn about disinflations by examining the historical record from the postwar United States. We focus especially on episodes when the Federal Reserve tightened monetary policy in an effort to bring about a disinflation. One finding is a negative one: the episodes were very heterogeneous in whether the Federal Reserve succeeded, and in the patterns of disinflation and the output costs if it did succeed. Moreover, the behavior of inflation was often very different from what was expected at the time. Two more constructive findings are that the Federal Reserve has consistently been able to ultimately bring about disinflation if it has kept its focus on that goal for long enough, and that supply shocks were central to the behavior of inflation in many episodes. We find suggestive evidence of an important independent effect of perceptions of the Federal Reserve's credibility and long-run objectives.

I. OVERVIEW

Since World War II there have been several times when the Federal Reserve made a policy decision to take action to reduce inflation (Romer and Romer, 2023). Figure 1 shows the deviations of inflation from what one would have predicted from a simple forecasting equation based on the past behavior of inflation. If decisions to disinflate were followed by actual disinflation, these deviations would be consistently negative. Figure 1 shows that, in fact, these deviations are highly variable. In some cases, inflation clearly falls relative to the baseline, such as following the decisions to disinflate in 1947 and 1979. But in others it rises and then falls (1974), barely moves (1958), or rises quite consistently (1968). This paper seeks to further document the variation across episodes, including the variation in the output and employment costs of disinflation. It then seeks to identify what accounts for these large differences across disinflationary episodes.

The obvious alternative to focusing on deliberate disinflations would be to just look at all actual periods of disinflation. The problem with this alternative is that it selects on outcomes. As a result, it will miss times when policymakers were trying to disinflate and failed, and it will include times when inflation fell for reasons unrelated to policy goals and actions. Thus, it will provide biased information about the factors affecting the speed and success of disinflationary policy.

II. EVIDENCE OF VARIATION

To document the variation in outcomes following deliberate disinflations, we will do a variety of exercises. The sign and size of deviations from a baseline forecast described above is one way to think about differences across episodes. A related dimension on which there is variation is the timing of disinflation. As can be seen in Figure 1, even in cases where inflation falls, the timing differs substantially. In the 1947 episode, inflation fell substantially relative to the baseline within a year; in the 1955 episode, inflation did not fall relative to the baseline for three years. Characterizing just how long and variable the lags with which disinflationary monetary shocks affect inflation would be useful.

Another aspect of variation involves the sacrifice ratio in each episode. How much output or employment loss is involved for a given amount of disinflation? This will provide a sense of variation in the cost of disinflation.

A third type of variation to be investigated is the degree to which the actual path of inflation following decisions to disinflate corresponded to expectations. To analyze this, we will use both private sector forecasts of inflation and the Federal Reserve's own staff forecasts (when they are available). A finding that some disinflations correspond more to the expected path than others could help focus further analysis. For example, it could suggest that in some episodes there were additional shocks. (Of course, it could also suggest that the model used to forecast the likely effect of policy were less sensible in some periods than in others.)

III. Explaining Variation in the Success of Disinflation

There are various candidate explanations for what may account for the relative success of different disinflationary policy shocks. One obvious one is the seriousness with which monetary policymakers pursued disinflation. Though our classification of disinflationary shocks is a 0-1 variable, the accompanying policy actions varied greatly in size. They also varied substantially in their duration. One possibility is that the disinflations that were most successful were the ones where the Federal Reserve took more aggressive action or stuck with it longer. A clear example of a disinflationary shock where the Fed took relatively minor actions and stopped quite quickly was that in December 1968. Not surprisingly, this is an episode where inflation fell very little. Another interesting example is the April 1974 shock. In that case, the monetary actions were quite strong and inflation fell substantially. However, policy was reversed quickly—which may explain why the successful disinflation was very short lived. At the other end of the spectrum were the back-to-back shocks in 1979 and 1981. The 1979 shock shares with 1974 the fact that it was large, but then policymakers backed off relatively quickly. The second shock in early 1981, however, was substantial and more long-lasting, and inflation fell dramatically in its wake.

To analyze the role of size and duration of disinflationary actions, we plan to analyze in depth the chronology of what the Federal Reserve did in each episode. We also plan to calibrate the severity of the actions. Such calibration is difficult because of trends in interest rates over time and evolution in the tools that monetary policymakers used. One could potentially consider the overall decline in aggregate demand relative to its path before the action, but that risks conflating the effects of monetary policy with other factors.

Though the direct aggregate demand impacts of monetary policy actions are likely important, it is also possible that Federal Reserve actions work through their effects on expectations. Perhaps the variation in the success of disinflations can be explained by different perceptions of policymakers' commitment to inflation reduction. To analyze this, we plan to analyze speeches of Federal Reserve officials to see how forcefully they spoke of inflation reduction. We will also look at newspapers to see if news accounts suggest that the media perceived some disinflationary actions as more credible than others. Finally, we also plan to look directly at measures of inflation expectations to see how they behave in the wake of monetary actions.

The presence of supply shocks may be another factor affecting the success of disinflationary policy. It appears that the behavior of oil prices may have played an important role in some episodes. For example, following the August 1978 shift to disinflationary policy, oil prices surged, likely counteracting any disinflationary impulse. However, oil price movements are not the only candidate supply shocks, and the direction of such supply shocks have been both counteracting and supporting disinflation. For example, following the December 1988 disinflationary shock, productivity boomed

and health care inflation fell. These developments likely explain some of the successful disinflation in the early 1990s. We plan to systematically examine the presence of supply factors following moves to disinflate. One idea is to use the deviation of the trimmed mean of inflation from actual, as a way of capturing supply changes broadly defined.

One interesting issue related to supply disturbances is the role of price controls. In two of the most striking disinflationary episodes, 1947 and 1974, the decision to enact contractionary monetary policy to get inflation down roughly coincided with an end to price controls. The end of such controls was accompanied by a one-time jump in prices to compensate for pent-up inflation. Once that temporary burst of inflation was out of the way, inflation reverted to something less extreme. To investigate the role of the end of price controls, we will analyze the likely restriction of price increases during the controls (to proxy for suppressed inflation). This will enable us to separate out the temporary jump in inflation from the underlying trend.

IV. CONCLUSION

We have obviously only started to work on this project and our conclusions will surely evolve as we dive into both the narrative record and undertake various empirical tests. However, we have done enough preliminary work to feel confident that we will be able to produce something useful and interesting. We would obviously be very grateful for any advice on how best to proceed.

FIGURE 1
FORECAST ERRORS FOR GDP PRICE INDEX INFLATION FOLLOWING DECISIONS TO DISINFLATION

