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Unstable Inflation Targets

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Executive Summary

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The recent global economic crisis has renewed debate over the appropriate long-run inflation rate that monetary policymakers should target. Some have argued that in "normal" times monetary authorities should pursue a higher average inflation rate. Doing so would raise nominal interest rates, thus providing the monetary authority with a cushion that would facilitate greater flexibility in lowering nominal interest rates during subsequent times of economic necessity. Although recent research finds little support for higher average inflation rates, the view persists among many economists that the added stability that might be achieved from a higher inflation target outweighs any of the losses associated with inflation. Policymakers are, however, reticent to depart from a commitment to low and stable rates of inflation. In a 2010 symposium at Jackson Hole, Ben Bernanke expressed his view that higher average inflation rates will lead to more volatile inflation and "inflation expectations would also likely become significantly less stable." This paper focuses on the question of whether higher inflation targets do, in fact, lead to greater stability.

Analysis

As a benchmark, the paper takes as its economic framework a simple theoretical model in which monetary policymakers adjust interest rates in accordance with a "Taylor rule" whenever inflation deviates from its long-run target rate. Private-sector agents know the form of the Taylor rule but they do not know the precise value and/or timing of the long-run inflation target. In this setting of imperfect information, private-sector agents form expectations based on a perceived model of the economy and they draw inferences about the inflation process by using recent data to create forecasts. Agents update their forecasting model in real time, accounting for new information as they receive it. Although the framework is theoretical, the paper also presents results in a calibrated New Keynesian model and demonstrates that the results are empirically relevant.

Results

- First, a central bank that increases the long-run inflation target from 2% to 4%, as is often proposed by critics of Federal Reserve policy, will lead to unstable inflation expectations and an inflation rate that substantially overshoots its targeted rate.
- Second, a higher long-run inflation rate is accompanied by greater inflation volatility. A more volatile inflation rate, combined with imperfect information about the long-run target, can lead to occasional nearly self-fulfilling bursts of inflation, disinflation, or deflation as private-sector inflation expectations become unanchored.
- Third, the instability arising from higher inflation targets is a consequence of imperfect communication by the central bank about its target. The instability arises in a wide variety of alternative policy rules including price-level targeting, optimal discretionary policy, and optimal policy with commitment.

Policy Implications

The results of this paper highlight the importance of a sound communication policy by the central bank. The instability arising from higher inflation targets can be ameliorated if the private-sector has perfectly credible information about the target. However, such communication is difficult to achieve because it needs to communicate both the size of the target and the time-frame of when the target is expected to be reached. If such perfect communication is not possible, the results of this paper caution against proposals to raise the central bank's inflation target.

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