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Monetary Policy Strategies to Foster Price Stability and a Strong Labor Market

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Abstract

I assess monetary policy strategies to foster price stability and labor market strength. The assessment incorporates a range of challenges, including uncertainty regarding the equilibrium real interest rate, mismeasurement of economic potential, and balancing the costs and benefits associated with employment shortfalls and labor market strength. I find that the ELB remains a significant constraint, hindering achievement of the inflation objective and worsening employment shortfalls. Symmetric policy reaction functions mitigate the most adverse effects of employment shortfalls by contributing to economic stability. Make-up strategies address ELB risks. These strategies call for policy to accommodate some period of inflation above its long-run objective following an ELB episode. I also consider an asymmetric shortfalls approach to policy. This approach provides accommodation in response to weak activity while foregoing tightening in response to strong activity. While the approach can, in principle, address ELB risks by raising inflation, it performs poorly. The shortfalls approach exacerbates economic volatility, worsens employment shortfalls, and creates excess inflationary pressures. Mismeasurement is not sufficient to limit the importance of strong responses to measured slack. Overall, monetary policy can promote price stability and labor market strength by focusing on economic stability, with a strategy targeted to address ELB risks.

Keywords: Monetary policy; Rules and discretion, effective lower bound, symmetric loss function, asymmetric loss function

JEL Codes: E52, E58, E37

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1. Introduction

Inflation targeting has become the standard monetary policy approach among advanced economies. Following adoption by a handful of central banks in the 1990s, over 60 central banks targeted inflation by the early 2020s, reflecting the success of the approach in promoting price and economic stability.[1] Nonetheless, inflation targeting must grapple with enduring and new challenges. Price stability and strong labor markets are complementary in the long run but may be in conflict at times. Low interest rates in the 2010s constrained the ability of central banks to achieve price and economic stability. The ability of forward guidance and quantitative easing to offset these constraints has been debated. Some have called for additional goals for monetary policy, such as greater focus on creating high pressure in labor markets and combating inequality.

Against this backdrop, I revisit three questions that recent experience suggests are critical for monetary policy strategies:

- Is the ELB likely to bind, and, if so, what strategies can mitigate any adverse effects?
- Should policy respond to measured slack and, if so, how forcefully and symmetrically?
- How can monetary policy promote labor market strength, with price stability?

The assessment includes factors that could limit the efficacy of a strategy. Uncertainty regarding the equilibrium real interest rate, r*, is considerable. A strategy should be robust to low values of the r*, such as those seen in the 2010s around the world, as well as to much higher values, such as those that prevailed in the 1980s and that may prevail going forward. The potential influence of mismeasurement in resource utilization requires incorporation of realistic, and potentially sizable, measurement error. Emphasis on employment shortfalls in monetary policy calls for a comparison of symmetric and asymmetric approaches to the promotion of full employment.

The results demonstrate that the ELB remains an important factor in monetary policy design. The quantitative analysis assumes that the distribution of the equilibrium real interest rate is centered on 2 percent, with only a 15 percent probability that the equilibrium real interest rate is below 1 percent as assumed in the FOMC's Summary of Economic Projections. Even so, the ELB has a sizable effect on economic performance.

[1] Kiley and Mishkin (2024) note that 64 countries were inflation targeters in 2022.

Because the ELB continues to represent an important constraint on stabilization policy, strategies to offset this constraint are needed. A broad set of make-up policy strategies ensure good economic performance. These make-up strategies provide additional accommodation following an ELB episode, with the degree of such accommodation tied to the achievement of policy objectives. A make-up strategy may condition liftoff from the ELB on the achievement of inflation above a threshold value and resource utilization rising to a sufficient level. Such approaches "make-up" forgone accommodation until the thresholds are reached and then revert to a symmetric rule. For example, the inflation threshold could involve inflation rising above its long-run objective and the resource utilization threshold could involve the unemployment rate falling to a level somewhat above its natural rate, with reversion to a standard policy rule when these thresholds are met. These approaches are versions of the Evans (2011) rule and the inflation threshold strategy of Bernanke, Kiley, and Roberts (2017). I show that these approaches, which involve a balanced approach to inflation and activity, limit economic volatility.

In addition to make-up strategies, central banks have deployed quantitative easing to provide accommodation when the ELB constrains the short-term policy interest rate. In the model simulations, make-up strategies are effective, in isolation, at mitigating ELB risks. This finding may overstate the efficacy of the forward guidance under make-up strategies. The prevalence of quantitative easing in practice suggest that it is important to assess how make-up strategies and quantitative easing interact. For example, make-up strategies and quantitative easing may, in combination, provide excessive stimulus. I show that strong and symmetric responses to inflation and activity in a policy rule guard against excessive stimulus, as such responses remove accommodation promptly when needed. Moreover, the benefits of strong and symmetric responses to inflation and activity are not affected significantly by mismeasurement in economic slack or the equilibrium real interest rate.

A different approach to offsetting adverse effects of the ELB introduces an asymmetry in policy to counteract indirectly the asymmetry induced by the ELB. Gust, Lopez-Salido, and Meyer (2017), Bundick and Petrosky-Nadeau (2023), and Penalver and Siena (2024) note that the ELB induces a downward bias in inflation. These authors emphasize that a monetary policy strategy that does not lean against labor market strength—and instead only acts to counteract employment shortfalls—can induce an upward bias to inflation and thereby mitigate ELB risks. This idea was also discussed in the FOMC's Tealbook B in 2016, with simulations of such an asymmetric