NBER 40th Annual Conference on Macroeconomics – Discussion Summaries

<u>Tradeoffs and Sacrifice over Rate Cycles: Activity, Inflation and the Price Level</u>

Authors: Kristin Forbes, Jongrim Ha, M. Ayhan Kose

Discussants: Lucrezia Reichlin, Mark W. Watson

Valerie Ramey opened the discussion by raising the issue of real wages. She noted that while the paper's sacrifice ratios based on output look favorable, the experience of real wages may tell a different story and cited recent research on wage erosion in the COVID-19 period by Guerreiro et al. (2025) and Afrouzi et al. (2024). She further referenced Morris Kleiner's observation that, because inflation was so low for so long, unions stopped bargaining over cost of living, leaving workers exposed to real wage cuts during the inflationary episode. This, she stated, should be included in the sacrifice ratio.

Olivier Blanchard expressed skepticism about the paper's focus on rate cycles, arguing that sacrifice ratios are fundamentally about business cycles rather than monetary policy responses per se. He referenced his work with Ben Bernanke to assert that the COVID-19 inflation episode was driven by supply shocks and expectation dynamics rather than monetary policy. Blanchard echoed Ramey's point about real wages, suggesting that dissatisfaction stems more from stagnant wages than from the price level itself. He concluded that a better understanding of the aversion to price increases was necessary before adjusting welfare frameworks.

Kristin Forbes responded by thanking the discussants and audience, acknowledging the complexity of the topic. Addressing Ramey's point, she noted that they have looked into real wages and found striking patterns: In the U.S., real wages fell sharply during the COVID-19 period—more than in any prior tightening episode—but eventually recovered on average, albeit with important distributional caveats. However, in Europe, real wages remained depressed. Forbes suggested that dissatisfaction with inflation may be driven by perceived unfairness, referencing work by Blanchard and Gorodnichenko showing people attribute wage increases to merit but price increases to external, unfair forces.

Forbes agreed with Blanchard that fiscal policy and supply shocks are crucial and emphasized that the paper explicitly asks whether differences in central bank responses—conditional on those shocks—still matter. The evidence suggests they do, with monetary policy strategy affecting inflation, output gaps, and price levels.

M. Ayhan Kose further addressed Blanchard's question about the focus on rate cycles. He noted that while many studies—including Ball (1994)—compute sacrifice ratios using changes in inflation and output without tying them to monetary policy, this approach risks attributing inflation changes to monetary policy even when they result from other forces. Kose argued that dating monetary policy cycles is essential to properly identifying the sacrifice ratio attributable to monetary policy. He also emphasized the importance of communication, pointing out that while variance decompositions may suffice for PhD-trained audiences, policymakers often rely on simpler metrics.

Oscar Jordà continued the discussion by questioning whether it is truly the interest rate cycle or the stance of monetary policy that matters. He noted that during COVID-19, rising savings and expansive fiscal policy likely increased the natural rate of interest (r^*) , implying that observed rate hikes may simply track r^* . He also questioned the validity of output gap measures when potential output is

declining and stressed the importance of accounting for fiscal policy, noting the sometimes-conflicting roles of fiscal and monetary authorities.

Replying to Jordà, Forbes acknowledged the importance of r^* and real rates. While she agreed that, ideally, they would date policy based on r^* , it is extremely difficult to estimate r^* for 24 advanced economies over a long period of time. Hence, nominal rates provide a more practical and comparable measure. Regarding his concerns about output gaps, she noted that the paper uses multiple measures to address this: While various measures often disagree at a point in time, the patterns over time are consistent, lending some robustness to their approach.

Frederic Mishkin contributed a comment on central bank credibility, arguing that the costs of establishing credibility depend on both historical context and current policy environment. He noted that while the Volcker disinflation involved a high sacrifice ratio, recent episodes may have benefited from "shock and awe" tactics that reduced the cost of credibility restoration. Mishkin also flagged the current U.S. policy dilemma, where fiscal pressures may complicate the Federal Reserve's ability to "look through" supply shocks.

Forbes agreed, highlighting that the credibility channel likely exhibits nonlinearities. She referenced recent literature showing that larger shocks have outsized effects on expectations and credibility, and that after years of anchored expectations, current dynamics may be more fragile.