[Ambiguity, Monetary Policy and Trend Inflation]

CFM-DP2017-09

Riccardo Masolo and Francesca Monti
Bank of England and Centre For Macroeconomics

US inflation displays a slow-moving trend that declined from its peak in the late 70s/early 80s to a level close to the 2% percent target the Federal Reserve announced in 2012. While the Federal Reserve did not have an explicit numerical target before that date, descriptive and survey-based evidence supports the idea that it was implicitly targeting inflation already in the 1990s, and possibly earlier. Therefore, accounting for the decline in trend inflation as the consequence of successive changes of the target inflation rate, as advocated in many recent papers, is more of a short cut than a compelling explanation of the phenomenon.

Our work links trend inflation and its dynamics to the confidence that the private sector has in the conduct of monetary policy. The low level of confidence (as measured in the surveys) that prevailed in the early 80s can explain why trend was that high back then. The successive increase in confidence, likely brought about by a greater degree of transparency and enhanced communication, can then explain why trend inflation converged to values very close to target.

We formally model the increase in confidence as a reduction in the degree of ambiguity (or Knightian uncertainty) and measure it using survey data. These data, together with our model, also provide a rationale for why measures of the inflation trend have been close to but generally below target in recent years.

Our analysis also has optimal policy predictions. When trend inflation exceeds target, it is optimal for policymakers to increase the responsiveness of the policy rate to inflation in deviation from trend and also to systematically aim for it would be optimal for policymakers to aim for a rate above the natural rate of interest. However, when ambiguity drives inflation below target, it would advisable to set the aim at a level below that implied by the natural rate of interest. In sum, in both circumstances, it is optimal for policymakers to lean again the distorted expectations that drive inflation from its target, although, the simplest and preferable way to bring the inflation trend in line with the inflation target is to reduce Knightian uncertainty as much as possible.