

What Price Index Should Central Banks Target? An Open Economy Analysis

There is currently a debate over the choice of the price index that central banks should target when economies are open and exposed to international price shocks. This paper derives the optimal price index by solving the Ramsey problem in a New Keynesian Small Open Economy model with an arbitrary number of sectors. Qualitatively, I compare its analytical expression with other popular indices such as the producer price index and the core/headline consumer price index, providing intuitive explanations of why targeting those indices is suboptimal. Quantitatively, I calibrate a 35-sector version of the model for 40 countries and show that stabilization of the optimal price index yields significantly higher welfare than that of alternative indices.