Aggregating Phillips Curves
(with Jean Imbs and Eric Jondeau)

Abstract

The New Keynesian Phillips Curve is at the center of two raging empirical debates. First, how can purely forward looking pricing account for the observed persistence in aggregate inflation. Second, price-setting responds to movements in marginal costs, which should therefore be the driving force to observed inflation dynamics. This is not always the case in typical estimations. In this paper, we show how heterogeneity in pricing behavior is relevant to both questions. We detail the conditions under which imposing homogeneity results in overestimating a backward-looking component in (aggregate) inflation, and underestimating the importance of (aggregate) marginal costs for (aggregate) inflation. We provide intuition for the direction of these biases, and verify them in French data with information on prices and marginal costs at the industry level.