



STS060.09 – The Forward-Looking Nature of Relative-Price Changes

Cevriye Aysoy¹, Semih Tumen²

¹Statistics, Central Bank of Turkey, Ankara, Turkey ; ²Economics, University of Chicago, Chicago, IL, United States

This paper brings a state-space interpretation to the models based on relative-price changes. There is an unobserved state variable characterizing heterogeneity in sellers' price adjustment behavior. It determines short-term inflation. Survey data on inflation expectations in the business sector enter as an input into the stochastic law of motion determining this unobserved state variable. Using data on core inflation, we estimate the times-series evolution of this state variable through Kalman filtering techniques. We show that a linear combination of the skewness and standard deviation of relative prices--that we calculate using micro-level price data--explains the behavior of this filtered state variable. Our analysis suggests that (i) relative-price changes have a forward-looking nature, (ii) disagreements over sellers' inflation expectations are driven by movements in relative prices; that is, price adjustment behavior is rational, and (iii) the standard deviation and skewness in relative-price changes have different information contents and transmit different signals about the price adjustment process. In particular, we document that movements in the standard deviation and the skewness in relative prices are complementary in determining short-term inflation. Our conclusion that relative-price changes are related to the disagreements over short-term inflation expectations in the business sector suggests another reason that menu costs alone cannot account for the differences in price adjustment behavior.

Keywords: Relative-price changes, Inflation expectations, Kalman filter

Biography: Semih Tumen is an Economist at the Central Bank of Turkey. His BS is from the Middle East Technical University (2000), MSc from the LSE (2006), and PhD from the University of Chicago (2010). His research has concentrated on labor markets, social networks, urban economics, income inequality and economic growth.

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