THE CYCLICAL BEHAVIOR
OF PRICES AND INFLATION

Xue Li
Dr. Joseph Haslag, Dissertation Supervisor

ABSTRACT

This paper documents business cycle facts of prices and the inflation rate for the United States from 1959:Q1 to 2013:Q3. Prices are countercyclical and the inflation rate is procyclical. In addition, prices lead the overall cycle by two quarters and the inflation rate lags the overall cycle by three quarters. To account for the observed cyclical behavior, two models are applied and extended including a business cycle model with endogenous money supply (Freeman and Huffman 1991) and a DSGE model with sticky prices (Ireland 2003). The former model only generates countercyclical prices but not procyclical inflation or the phase shift of prices relative to the overall cycle. For the latter model, its sticky-price version captures all the observed cyclical facts; whereas its flexible-price version fails to capture the procyclical behavior of inflation and the phase shift of prices relative to output. Better performance of the sticky-price model indicates that nominal rigidity can account for the cyclical behavior of prices and inflation. Thus, a powerful empirical business cycle model should incorporate a reasonable degree of price stickiness.