Aggregate Hours Adjustment in Frictional Labor Markets∗

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January 2008

Abstract

We evaluate the ability of the labor market search and matching framework to account for the variation in aggregate hours worked both at the intensive and extensive margins. To this end, we develop and estimate a general equilibrium business cycle model with search frictions. Production utilizes capital, subject to investment adjustment cost, and labor. The labor market is characterized by search and matching frictions subject to variable hiring costs. We also allow for endogenous variations in separation and accessions. Firms and workers bargain jointly over wages and hours worked. We estimate the structural model on aggregate and labor market data for the U.S. using Bayesian techniques. The model is driven by productivity, preference, mark-up and investment-specific shocks, of which we find the latter to be crucial in explaining dynamics. Mark-up shocks, on the other hand, play only a minor role. The model is capable of capturing the observed volatility of unemployment and vacancies by virtue of an investment channel and the possibility of ‘upgrading’ of existing employment relationship. This leads to a form of job specificity which increases firms’ incentive to create vacancies. We also find that the data provide strong evidence for increasing returns in the matching and job posting technology, which challenges standard assumptions in the literature about the nature of these costs.

JEL Classification: C11, C32, E20, E24,
Keywords: Bayesian Estimation, Unemployment, Vacancies, Investment-specific Shocks

∗Nashat Moin provided excellent research assistance. The views in this paper are those of the authors and not necessarily those of the Deutsche Bundesbank, the Federal Reserve Bank of Richmond, or the Federal Reserve System.
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