Abstract

The goal of this thesis is to develop a DSGE model that accounts for the key business cycle properties of the Czech labor market. We used standard New Keynesian framework for monetary policy analysis and incorporated an elaborated labor market setup with equilibrium wage derived via an alternating offer bargaining protocol originally proposed by Rubinstein (1982) and follow the work of Christiano, Eichenbaum and Trabandt (2013) in the following steps. Firstly, we calibrated the closed economy model according to values suited for the Czech economy and found that the model can not only account for higher volatility of the real wage and unemployment, but can also explain the contemporaneous rise of both wages and employment after an expansionary shock in the economy, so called Shimer puzzle (Shimer, 2005a). Secondly, we demonstrated that the alternating offer bargaining sharing rule outperforms the Nash sharing rule under assumption of using the hiring costs in our framework (more so while using search costs) and therefore is better suited for use in larger scale models. Thirdly, we concluded that after estimating the labor market parameters using the Czech data, our model disproved the relatively low values linked to the probabilities of unsuccessful bargaining and job destruction.

JEL Classification: C11, C78, E2, E24, E32

Keywords: unemployment, endogenous wages, alternating offer bargaining, business cycles, DSGE model, Bayesian estimation, search and matching

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