The Unnatural rate of Unemployment: Reflections on the Barro-Gordon and Natural Rate paradigms

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Abstract

Unemployment and inflation exhibit a positive correlation during the 1970s in the United States. Ireland (1999) uses the time-inconsistency framework to study long and short run dynamics between the two rates. However, for the long-run, we find that the conditions for cointegration are not met whereas the short-run restrictions grounded in economic theory are strongly rejected. We look at the moving natural rate theory for an alternative explanation of the abnormal behaviour of inflation and unemployment. We employ a structural vector autoregression (SVAR) model to study the impact of shocks to natural rate on the two series. We use the Beveridge-Nelson decomposition to extract short-run natural rate estimates from the unemployment series. Further, we identify factors affecting the short-run natural rate using regressions. We conclude that changes in labor-market institutions like unemployment benefits, labor productivity and real wages, as well as changes in labor force growth and real interest rates explain significant variation in the estimated natural rate of unemployment.