A Regime-Switching SVAR Analysis of the Zero-Interest Rate Policy

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Central banks of major market economies have in recent years embarked on the Zero Interest Rate Policy (ZIRP) of maintaining the policy rate at a very low level, with a supply of large amounts excess bank reserves. We develop a regime-switching structural vector autoregression (SVAR) in which the regime, chosen by the central bank, is endogenous and observable. The model can incorporate the exit condition, imposed on itself by the central bank, of not ending the ZIRP. We then apply the model to Japan, a country that has accumulated, by our count, 130 months under three spells of the ZIRP regime as of December 2012. Our impulse response analysis, which takes into account the regime endogeneity, yields two findings. First, an increase bank reserves under ZIRP raises inflation and output. Second, switching to a IRPdeflationary. In particular, the decision by the Bank of Japan to terminate the ZIRP in July 2006 was not deflationary. However, these is considerable uncertainty about these findings because of relatively wide error bands.