

## **Trend Inflation in the Japanese pre-2000s: A Markov-Switching DSGE Estimation**

Ryo Kato (joint work with Junji Maehashi and Shin-ichi Nishiyama)

### **Abstract**

In Japan, the inflation rate declined to near-zero, whereas the monetary policy faced a Zero Lower Bound (ZLB) in the 1990s. We examine whether trend inflation has fallen to near-zero prior to the ZLB. For this purpose, we estimate Japanese pre-2000 trend inflation developing a Markov-Switching New Keynesian Dynamic Stochastic General Equilibrium (DSGE) model in which non-zero trend inflation is explicitly incorporated as a Markov chain state. Our estimation results indicate that the trend inflation remained broadly stable at 2.0--4.0 percent from the 1960s to the late 1970s prior to the second global oil crisis. This result is consistent with the narratives which suggest that the power shifted from the government to the Bank of Japan where more hawkish officials took office in 1974. Up until 1997 when the ZLB was hit, the trend inflation hovered well above zero, mostly at near 1.0 percent.