

# Fiscal and Monetary Interactions in Japan under Zero Interest Rates: New Identification for Monetary Policy at the Zero Lower Bound\*

Hiroshi Morita<sup>†</sup>

Graduate School of Economics, Hitotsubashi University

16 Jan. 2014

## Abstract

This study presents a new strategy for identifying unconventional monetary policy shocks in the framework of the time-varying parameters vector autoregression (TVP-VAR) model. We characterize monetary policy shocks at the zero lower bound (ZLB) of the short-term interest rate by combining the zero restrictions on the interest rate equation with the sign restrictions. Furthermore, this study investigates whether the effects of fiscal policy are enhanced during a ZLB period, as predicted by theory. The main findings are as follows. First, during a ZLB period, the volatility of short-term interest rates is quite small, while that of the monetary base is large. Second, both monetary and fiscal policies have positive time-varying effects on output. Third, there is no evidence that the effects of fiscal policy increase during a ZLB period.

Keywords: Unconventional monetary policy; Fiscal policy; TVP-VAR model; sign restriction; MCMC

JEL code: E62, E52, C11, C32

---

\* I would like to thank my supervisor, Etsuro Shioji, for helpful comments and discussions. I also acknowledge Toshiaki Watanabe, Takashi Kano, and Naohito Abe for their valuable comments. Of course, all errors are my own.

<sup>†</sup> E-mail: [hiroshi.morita1013@gmail.com](mailto:hiroshi.morita1013@gmail.com), Tel: +09062355694 (Hiroshi Morita)