Version 2, April 22, 2013

Time varying pass-through: Will the yen depreciation help Japan hit the inflation target? [*1]

Etsuro Shioji[*2]

Abstract

This paper estimates time evolution of the exchange rate pass-through into Japanese domestic prices using the time-varying parameter-volatility VAR method. The Japanese yen has depreciated against the US dollar in recent months, from about 78 JPY/USD in early October 2012 to almost 100 in mid April 2013. Many hope that this would help the Bank of Japan hit the newly announced inflation target of 2%. On the other hand, existing research suggests that the extent of pass-through has declined lately. In this paper, I use an updated data set and the new empirical methodology to find that there has been a notable revival of pass-through in recent years. Thanks to this, a 25% depreciation of the yen is expected to push up the Japanese CPI by almost 1%; not enough to achieve the target, but it is still going to be a non-trivial contribution.

Key words: exchange rate, pass-through, time-varying parameter VAR with stochastic volatility, import prices, domestic prices

JEL classification：F41， E31

[*1] Much of the author’s knowledge reflected in this paper has been developed through a series of joint research with Taisuke Uchino (Daito Bunka University). I am also indebted to Jouchi Nakajima (Bank of Japan) for his enlightening comments about the statistical methodology and matlab coding. I also thank participants at the 5th GRIPS International Conference of Macroeconomics and Policy (February 22, 2013) and “International Conference: Frontiers in Macroeconometrics” at Hitotsubashi University (March 3, 2013) for their comments and discussions. Needless to say, all the remaining errors are my own responsibility.

[*2] Department of Economics, Hitotsubashi University: shioji [at] econ.hit-u.ac.jp.