The Effects of Commodity Price Shocks and Systematic Monetary Policy in Developed Countries*

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April 20, 2013

Abstract

The main goal of this paper is to investigate whether central banks in developed countries respond to commodity price shocks during pre- and post-Great Moderation, and if so, the policy responses work well to control a change in CPI triggered by the shocks. Here, we focus on industrial mineral price as commodity price, and deal with eight countries and the central banks: the U.S. as a benchmark, Canada and Australia as industrial mineral resource countries, and Japan, the U.K., France, Germany, and Italy as non-resource countries. Estimating impulse response functions by local projections, we find that except for Japan, all of the central banks in developed countries respond to commodity price shocks during post-Great Moderation which seem to cause a change in CPI. And the central banks in Canada, and France seem to be able to control a change in CPI triggered by commodity price shocks, but the central banks in the U.S., Australia, the U.K., Germany and Italy do not during post-Great Moderation. Also, all of the central banks in developed countries respond to commodity price shocks "indirectly," especially a change in commodity price itself. These results imply that commodity price would be one of the most important factors of monetary policy in developed countries, and need to be included in Taylor rule in theory as an independent variable.

Keywords: Industrial Mineral Price, Systematic Monetary Policy, Local Projections, Impulse Responses, Response Decomposition, Counterfactual Analysis

JEL Classification: C32, E58, F14

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*I thank my thesis advisor Takayuki Tsuruga for many useful comments and suggestions. Also I am grateful to macroeconomic seminar participants at Kyoto University for their helpful comments.

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