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

Ph.D. student, Kyoto University Atsushi Sekine

We investigate whether central banks in eight developed countries reacted to commodity price shocks before and in the Great Moderation periods and, if so, whether their responses restrained changes in the consumer price index (CPI) triggered by the shocks. Unlike previous studies that base their conclusions on oil prices, we use prices of industrial mineral as an index of commodity prices. We examine central banks in the US as a benchmark; Canada and Australia as industrial mineral producers; and Japan, the UK, France, Germany, and Italy as non-resource countries.

By estimating the impulse response functions by local projections, we find that in the Great Moderation period central banks with the exception of the Bank of Japan reacted to commodity price shocks that altered the CPI. Central banks in Canada and France seem to have been able to control CPI variations; however, central banks in the US, Australia, the UK, Germany and Italy do not in the Great Moderation period. Moreover, each of the central banks reacted "indirectly" to commodity price shocks, especially through changes in commodity prices. These results imply that commodity prices affected CPI variations and were an important contributor of monetary policy in those countries in the Great Moderation period.

Keywords: Industrial Mineral Prices, Systematic Monetary Policy, Local Projections, Impulse Responses, Response Decomposition

JEL Classification: C32, E58, F14