

Asset Price and Monetary Policy – The Effect of Expectation Formation

Nan-Kuang Chen

National Taiwan University
Hong Kong Institute for Monetary Research

and

Han-Liang Cheng

Chung-Hua Institution for Economic Research

January 2011

Summary

This paper is a theoretical study of the effects of monetary policy reacting to fluctuations in asset price, accounting for the expectation formation effect of policy regime shift in a DSGE model calibrated to the U.S. economy. We find that the effect of expectation formation can substantially influence the movement of asset price. In contrast to the linear policy rule, under the regime switching policy rule reacting to asset price can generate substantial stabilization effect: the “expected” inflation-output volatility frontier shifts downward, thereby lowering both the volatilities of inflation and output for all possible policy choices. The trade-off between the expected volatility of inflation and that of output, as demonstrated by the “Taylor curve,” greatly diminishes, implying that the Taylor rule which considers expectation formation effect and asset price movement expands the set of monetary policy choices available for monetary authority.