Does the monetary policy rule under asymmetric preferences stimulate China’s inflation to be more fluctuated?

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Abstract

After China has introduced market economy officially since 1992, China’s monetary authority has tried to manage its economy by means of monetary policies instead of administrative orders before then. Compared to the planning economy period until 1992, the monetary policies have contributed to maintaining the stabilities of inflation and real economic growth. On the other hand, inflation seems to be far more fluctuated than real economic growth since 1992. Over the period of 1996-2008, the standard deviation of inflation is 2.87, whereas that of real economic growth is only 1.52. Whether are the relatively larger inflation fluctuations caused by China’s monetary policies or not?

Many economists tried to estimate China’s monetary policy rule so as to evaluate its effect on China’s economy. The monetary policy rules in these studies can be considered as a linear first-order condition of a quadratic-linear problem under symmetric preferences of the monetary authority, in which the monetary authority puts a symmetric weight on positive and negative deviations of inflation and output from the target values in its quadratic loss-function. Blinder (1997, 1998), however, suggests from his experience as Fed Vice-Chairman that the monetary authorities trend to put an asymmetric weight on positive and negative deviations of inflation and output from the target values because of political pressures.

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Following Blinder’s suggestion and based on the method proposed by Surico (2007), this paper first uses quarterly data from 1996 to 2008 to examine whether China’s monetary authority sets its monetary policy rule under asymmetric preferences or not. We find that China’s monetary authority is more concerned about both deflation and the expansion of real output beyond the potential level in the period. The monetary policy rule reflects the fact that China’s monetary authority would escape from deflation due to the shock of the Asian financial crisis in the period of 1998-2002 and keep preventing from the overheating of economic growth in the other periods.

In order to simulate the impact of the monetary policy rule under asymmetry preferences on China’s economy, this paper uses a two-country DSGE model with heterogeneous firms and incomplete asset market. In the model, we assume that there are two types of intermediate goods firms in each country so as to consider the effect of incomplete nominal exchange rate pass-through. The one is local currency pricing (LCP) firms and another is producer currency pricing (PCP) firms. Because China’s asset market is incomplete, we assume that only foreign bonds are an internationally tradable asset and home households hold the asset with a risk premium in the model.

Based on the DSGE model, we find that compared to a benchmark monetary policy rule under symmetric preferences, the monetary policy rule under asymmetric preferences would increase inflation fluctuations by 20% and decrease real GDP fluctuations by 2.5%, because it would stimulate both domestic and imported inflations to be more flexible and put down China’s real sectors to be more stable. Furthermore, although nominal exchange rate pass-through has some impacts on both inflation and output fluctuations, the monetary policy rule under asymmetric preferences dominates it.

References

