

# Do credit market imperfections justify a central bank's response to asset price fluctuations?

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## Abstract

Do credit market imperfections justify a central bank's response to asset price fluctuations? This paper addresses this question from the perspective of equilibrium determinacy. In the model used in this paper, the prices are sticky and the working capital of firms is subject to asset values because of a lack of commitment. If credit market imperfections exist to a small degree, the Taylor principle is a necessary and sufficient condition for equilibrium determinacy, and monetary policy response to asset price fluctuations is good from the perspective of equilibrium determinacy. However, if credit market imperfections exist to a large degree such that the collateral constraint is binding, then the Taylor principle no longer guarantees equilibrium determinacy, and monetary policy response to asset price fluctuations becomes a source of equilibrium indeterminacy. In this sense, the existence of credit market imperfections denies the propriety of monetary policy response to asset price fluctuations. We also find that there is a case where improvements in credit market imperfections reduce the determinacy region of the model parameters.

**Keywords:** asset prices; credit market imperfections; collateral constraints; equilibrium indeterminacy; monetary policy; sticky prices; Taylor principle

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