Imperfect Interbank Markets and the Lender of Last Resort *

Tarishi Matsuoka †

January 2011

Abstract

This paper presents a monetary model in which interbank markets bear limited commitment to contracts. Limited commitment reduces the proportion of assets that can be used as collateral, and thus banks with high liquidity demands face borrowing constraints in interbank markets. These constraints can be relieved by the central bank (a lender of last resort) through the provision of liquidity loans. I show that the constrained-efficient allocation can be decentralized by controlling only the money growth rate if commitment to interbank contracts is not limited. Otherwise, a proper combination of central bank loans and monetary policy is needed to bring the market equilibrium into a state of constrained efficiency.

Key words: Overlapping generations, money, interbank markets, limited commitment, the lender of last resort.

JEL Classification: E42, E51, G21

*I would like to thank Tomoyuki Nakajima, Akihisa Shibata, and Makoto Watanabe for their helpful comments and suggestions. Of course, all errors are mine. This study is financially supported by the research fellowships of the Japan Society for the Promotion of Science for young scientists.

†Japan Society for the Promotion of Science and Graduate School of Economics, Kyoto University, Japan, Email: tarishi727@gmail.com