Money Supply and Credit in a Cashless Economy

Hajime Tomura*

April 13, 2016

Very preliminary and incomplete. Please do not circulate.

Abstract

This paper introduces limited participation into a neo-classical growth model to reflect the reality that the sellers of assets do not accept the buyers' IOUs, but the buyers can still arrange loans from some other creditors than the sellers. This friction generates the need for a bridge loan of money from the central bank. Optimal money supply resembles intraday money supply in the channel system. If money must be supplied through banks, then a negative shock to the limit on banks' leverage causes a substitution from bank credit to direct finance, as observed during the financial crisis of 2007-09.

*Faculty of Political Science and Economics, Waseda University, 1-6-1 Nishiwaseda, Shinjyuku-ku, Tokyo, 169-8050, Japan. Email: tomura.hajime@gmail.com. I thank Hiroshi Fujiki, Charlie Kahn, and Will Roberds and participants in Osaka Conference on Growth, Stagnation and Macroeconomic Fluctuations for their comments.