Investment and Borrowing Constraints: Evidence from Japanese Firms*

Hiroyuki Kasahara†
University of British Columbia

Yasuyuki Sawada
University of Tokyo

Michio Suzuki
University of Tokyo

April 22, 2010

Preliminary and incomplete.

Abstract

In this paper, we quantitatively examine the effect of changes in bank's BIS capital adequacy ratio on corporate investment, using Japanese corporate finance data for the late 1990s. To this end, we develop an industry model with heterogeneous firms facing borrowing constraints. We model the borrowing constraints as a function of bank's BIS ratio as well as firm's balance sheet information, explicitly taking into account the possibility of capital crunch. Combining the corporate finance data compiled by the Development Bank of Japan and the Nikkei NEEDS bank balance sheet data, we estimate the structural model and conduct a counterfactual experiment to quantify the effect of the capital injections that took place in 1998 and 1999 in Japan. Preliminary parameter estimates suggest that the model replicates the empirical patterns of corporate investment reasonably well.

Journal of Economic Literature Classification Numbers: E22; G21; G28
Keywords: Capital Crunch; Capital Injection; BIS Regulation

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*The substantial part of this work was done while the third author was affiliated with Institute for Monetary and Economic Studies, the Bank of Japan. Views expressed in this paper are those of the authors and do not necessarily reflect the official views of the Bank of Japan.

†Corresponding author. Mailing address: Department of Economics, University of British Columbia, 997 - 1873 East Mall, Vancouver, BC V6T 1Z1, Canada. Tel.: 604-822-8624; Fax: 604-822-5915. E-mail address: hkasahar@interchange.ubc.ca