Bank Loan Supply Shocks and the Real Economy:

The Case of Japan*

Koji Takahashi $^{\dagger \ddagger}$

January 2016

Abstract

In this paper, I examine the effect of bank loan supply shocks, using bank lending stance shocks derived from the Short-term Economic Survey of Enterprises (Tankan) survey data in Japan. The identified bank lending stance shocks enable us to investigate the effect of loan supply shocks on the real economy over the past 30 years in a consistent manner, thereby leading to three main conclusions. First, a negative bank loan supply shock, which means a tightening of banks' lending stance, significantly decreases real GDP growth rates. However, loan supply shocks were not main driving factors for fluctuations of the real economy; the contribution of bank loan supply shocks to GDP is approximately 7%. Second, I show that the effect of negative bank loan supply shocks during the late 1990s banking crisis was substantially larger if compared to that during the 2008 crisis. Third, I find that the economy with a zero lower bound constraint is more vulnerable to an adverse loan supply shock compared to that without that as predicted by existing theoretical models. In a zero lower bound environment, loan supply shocks contribute to approximately 15% of the GDP fluctuations.

JEL classification: G21, E50.

Keywords: Bank Loan Supply Shocks, Zero Lower Bound, Tankan.

^{*} The author would like to thank James Hamilton, Ulrike Schaede, Allan Timmermann, Johannes Wieland, Thomas Baranga and Claudio Labanca for helpful comments and suggestions. Views expressed in this paper are those of the author and do not necessarily reflect the official views of the Bank of Japan. For the latest version of this paper, see http://ssrn.com/abstract=2619874

[†] Department of Economics, University of California, San Diego, 9500 Gilman Dr., La Jolla, CA, 92093-0508, United States of America, e-mail: ktakahas@ucsd.edu, fax: +1-858-822-2657.

[‡] Bank of Japan.