

Identification of relationship lending by significant ties*

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Abstract

Relationship lending is lending with a close relationship between a bank and a borrower, which is expected to help reduce borrowing costs. However, it is unclear how widely it is used in reality. This measurement difficulty makes it challenging to evaluate its benefits accurately. This paper proposes a novel empirical framework for identifying relationship lending in transaction data between banks and borrowers in a more objective manner by determining the set of *significant ties* from an ensemble of undirected and unweighted bipartite networks. With the detected relationship lending between banks and borrowers, we estimate the magnitude of the additional lending volumes based on relationship lending. From the financial data in Japan from 1977 to 2021, the usage of relationship lending is estimated as over 50% through the sample period but has changed considerably over time. We find that the lending volume made by relationship lending is 34% larger than the volume made by transaction lending. Although the relative lending volume of relationship lending against transaction lending has been declining, the importance of relationship lending remains substantial for obtaining a larger volume of lending.

JEF Classification: C81, G12, G21, L14;

Keywords: Relationship lending, bank-borrower networks; significant ties.

* We appreciate the valuable comments from Masami Imai, Kosuke Aoki, Junichi Yamasaki, Shingo Umino, Real Arai, Takashi Yanagawa, Taiji Hagiwara, Toshitaka Fukiharuru, Atsushi Miyake and Naoki Shintoyo. Ogisu acknowledges financial supports from the Doctoral Student Fellowship at Kobe University and Ishii Memorial Securities Research Promotion Foundation. Shibamoto received financial support from the Japan Society for the Promotion of Science (JSPS KAKENHI Grant Number 20H05633 and 21K01579).