Why Inward FDI in Japan is So Low? An Insight from Machine Learning*

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Abstract

Inward FDI in Japan is extremely low compared with other countries. In 2020, the ratio of inward foreign direct investment (FDI) stock to GDP in Japan is 4.9 percent, which is ranked 198th of 201 countries. Is Japan an outlier country whose FDI pattern is difficult to explain by a trade model? Why inward FDI in Japan is so low? In this paper, we employ a machine learning (ML) method to answer these questions, building upon the gravity model of bilateral FDI. Our main findings are twofold. First, Japan is not an outlier country. While the gravity model continues to be the backbone of the analysis of bilateral FDI, a "fine tuning" by a ML method may be useful for the policy making. Second, the inward FDI in Japan is low because Japan faces aging and declining population, has huge government deficit, and use language very different from English. Noting that these factors cannot be changed in the short term, policy reforms should be discussed from the longer-term perspective in order to increase inward FDI in Japan.

Key words: Inward FDI; Gravity Model; Machine Learning
JEL classification codes: F14, F21

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