Firms in Global Value Chains and Their Responses to Exchange Rate Changes*

(Preliminary. Please do not quote.)

Keiko ITO (Chiba University and PRI)
Naoto JINJI (Kyoto University and PRI)
Toshiyuki MATSUURA (Keio University and PRI)
Uraku YOSHIMOTO (PRI)

April, 2024

Abstract

This study aims to analyze how Japanese exporting firms adjust export prices in response to exchange rate fluctuations and how export volumes respond to these price changes, utilizing export-import declaration data collected by Japan Customs combined with firm-level information taken from the Ministry of Economy, Trade, and Industry's survey for the period from 2014 to 2020. The estimation results suggest that firms with a high import intensity tend to choose foreign currency invoicing and that the choice of foreign currency invoicing leads to incomplete exchange rate pass-through (ERPT). We also find that not only is ERPT small, but also the changes in export quantity in response to price fluctuations are quite small. Furthermore, it takes over a year for changes in export prices to affect export quantities significantly. In particular, intermediate goods exhibit a very small elasticity of export quantity. The results may suggest that involvement in GVCs, which entails actively importing intermediate goods from abroad and exporting them for further processing in foreign countries, has a significant impact on firms' pricing strategies and the responsiveness of export quantities to exchange rate fluctuations.

Keywords: Exchange rate pass-through, export elasticity, global value chains, Customs data, Japan

JEL classification: D23, F14, F23, F3

---

* This study is an outcome of the research conducted jointly with the Policy Research Institute (PRI) after submitting a request for use of custom's export and import declaration data to the Japanese Ministry of Finance (MOF) based on the "Guideline on the utilization of custom's export and import declaration data in a joint research with Policy Research Institute," and receiving approval in February 2022. The views expressed in this paper are those of the authors' personal responsibility and do not represent the official views of MOF or PRI.