

The Trade Effects of the US Export Control Regulations

Kazunobu HAYAKAWA[#]

Bangkok Research Center, Institute of Developing Economies, Thailand

Abstract

This study empirically investigates the trade effects of US export regulations. In particular, we focus on those regulations on exports of integrated circuits (ICs) and IC-manufacturing equipment (IME). To this end, we employ the monthly worldwide trade data from January 2018 to July 2023. Our findings from gravity estimations can be summarized as follows. First, the changes in US export regulations significantly decreased US exports to China. In particular, the exports of main IC products (i.e., processors) decreased through the reduction of export quantities after US tightening export regulations in October 2022. This tightening also significantly decreases the US exports of IME to China. Second, tightening the foreign direct product rule did not change exports of a main IC product from Taiwan (i.e., other ICs) to China but significantly decreased those from Korea (i.e., memories). Third, these regulations decreased the exports of IME from the Netherlands to China significantly, while Japanese exports of IME to China did not change significantly. In short, the effects in the third economies are not uniform.

Keywords: US, Export control, China, integrated circuits, semiconductors

JEL Classification: F15; F53

[#] Author: Kazunobu Hayakawa; Address: JETRO Bangkok, 127 Gaysorn Tower, 29th Floor, Ratchadamri Road, Lumpini, Pathumwan, Bangkok 10330, Thailand; Tel: 66-2-253-6441; Fax: 66-2-254-1447; E-mail: kazunobu_hayakawa@ide-gsm.org.