

Was there a structural break in the impacts of exchange rates on the prices of Japanese machinery exports to the US?

SaangJoon Baak
Professor
Waseda University, Japan
e-mail: baak@waseda.jp

Jung-Geun Yoo
Adjunct Professor
Hanyang University, Korea
e-mail: jgyoo@hanyang.ac.kr

May 10, 2024

Abstract

The purpose of the research is to investigate whether the impact of exchange rates on export prices in the machinery exports from Japan to the US has changed after the Great Recession. The machinery sector in the paper includes HS-code 84, 85 and 87, which occupy around 70% of Japanese exports to the US for the last two decades. The system GMM estimations with the trade data at the 10-digit HS code level from 2002Q1 to 2021Q4 show that a 1% depreciation of the yen reduces Japanese export prices by 0.28% before the Great Recession. On the contrary, the impact of exchange rates on export prices turns out to be much smaller and statistically insignificant after the Great Recession. The estimations for each of the three sectors produce similar results. The findings in the paper shed a light on the puzzle that Japanese exports do not increase during weak yen periods after the Great Recession. Japanese exporters do not decrease export prices despite cheaper Japanese currency. Rather, it seems they try to increase earnings by maintaining export prices somewhat stable.

JEL Classification: C33, F14, F17

Keywords: Japanese machinery exports, exchange rates, export prices, system GMM