

# **Simulation analysis of global economic decoupling - Impact on the global economy and Japan's regional economy**

**Ikuo KUROIWA**

*Faculty of International Economic Studies, University of Niigata Prefecture*

**Satoru KUMAGAI, Toshitaka GOKAN**

*Development Studies Center, Institute of Developing Economies, Japan External Trade Organization IDE-JETRO*

This paper conducts a simulation analysis using the IDE-GSM, a spatial computable general equilibrium (CGE) model, to examine the economic impact of a world divided into two camps: the U.S. side and the China-Russia side. The results show that the more severe the confrontation between the two camps, the greater the negative impact on the global economy. In 2030, global GDP is projected to decrease by 3.2% under Scenario 1 and by 10.6% under Scenario 2. Both the Western and Eastern camps suffer significant blows in either scenario, with the semiconductor, automotive, and electronics industries being particularly affected. On the other hand, neutral countries, especially ASEAN nations, can benefit from the confrontation between the two camps. The negative impact on the Japanese economy reaches 4.5% under Scenario 1 and 15.0% under Scenario 2, with the semiconductor industry being hit particularly hard. In Japan's regional economy, the effects of decoupling are spread almost evenly across all prefectures in Japan, so the differences in impact between regions are not significantly large. However, the effects of decoupling reflect the characteristics of each region, including the industrial structure, with Okinawa Prefecture and the Kyushu region having a relatively large impact.

Keywords: Spatial Economics, Decoupling, Simulation Model