

**KAZUMA EDAMURA**

Kanagawa University, Japan

**KONOMI TONOGI**

Rissho University, Japan

**TAKAYUKI ISHIKAWA**

Rissho University, Japan

## **THE PRODUCTIVITY J-CURVE FROM AN INTERNATIONAL PERSPECTIVE**

### **Abstract:**

We estimate productivity J-curve using firm-level panel data from Japan, France, Germany, and the U.S. Using panel data from 2006 to 2020, we consider not only tangible assets but also intangible assets such as ICT-related assets and R&D to estimate firm value function, and then used the results to estimate TFP, which takes into account the adjusted cost of investment. The estimation results showed that J-curve was measured in the 2010s in Japan, France, and Germany. On the other hand, in the U.S., J-curve was measured in the 2010s in ICT-intensive industries.

### **Keywords:**

productivity J-curve, panel data, intangible assets

**JEL Classification:** D24, D20