

**BRC RESEARCH REPORT No. 36**

# **Technology Fields and Industrial Development in East Asia**

**April 2025**

**Edited by**

**Koichiro Kimura**

**Institute of Developing Economies,  
Japan External Trade Organization (IDE-JETRO)**

---

**Bangkok Research Center, JETRO Bangkok / IDE-JETRO**

**127 Gaysorn Tower, 29th Floor, Ratchadamri Road, Lumpini, Pathumwan, Bangkok 10330,  
Thailand**

©2025 by author(s)

No part of this publication may be reproduced without the prior permission of the author(s).

# Contents

Preface

## Chapter 1

Technology Position and Profitability: The case of Chinese construction  
machinery firms ..... 1

*Koichiro Kimura*  
*Hiroshi Matsui*  
*Kazuyuki Motohashi*  
*and*  
*Shun Kaida*

## Chapter 2

Technology Fields of Automotive Parts Suppliers in Aichi Prefecture, Japan  
.....13

*Yasushi Ueki*

## **Preface**

In this study, we focused on a firm's technology fields and analyzed their relationship with firm performance and the impact of technological change. Our main findings are as follows: (1) the technologies shared among firms in an industry can be a standard for their business, so it acts as an entry barrier for new entrants in the industry, but also poses a risk for incumbents not to adapt agilely to a drastic technological change; (2) the auto parts industry is facing the major technological change of electrification, but suppliers are diversifying their technologies, so it is important to gain profits from existing markets and enter non-automotive industries. As innovation activities increase worldwide, it is important to objectively show the technological similarities and differences among firms and industries, and further analyze their systematic effects on firm growth.

This report is the result of “Technology Positions of Firms and Industrial Development in Emerging Countries” research project organized at the Institute of Developing Economies, JETRO, from April 2021 to March 2022. We would like to express our deep appreciation to the staff members at JETRO Bangkok and the Institute of Developing Economies for their kind support.

K. Kimura