

New Frontiers in Regional Science: Asian Perspectives

Volume 25

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New Frontiers in Regional Science: Asian Perspectives

This series is a constellation of works by scholars in the field of regional science and in related disciplines specifically focusing on dynamism in Asia.

Asia is the most dynamic part of the world. Japan, Korea, Taiwan, and Singapore experienced rapid and miracle economic growth in the 1970s. Malaysia, Indonesia, and Thailand followed in the 1980s. China, India, and Vietnam are now rising countries in Asia and are even leading the world economy. Due to their rapid economic development and growth, Asian countries continue to face a variety of urgent issues including regional and institutional unbalanced growth, environmental problems, poverty amidst prosperity, an ageing society, the collapse of the bubble economy, and deflation, among others.

Asian countries are diversified as they have their own cultural, historical, and geographical as well as political conditions. Due to this fact, scholars specializing in regional science as an inter- and multi-discipline have taken leading roles in providing mitigating policy proposals based on robust interdisciplinary analysis of multifaceted regional issues and subjects in Asia. This series not only will present unique research results from Asia that are unfamiliar in other parts of the world because of language barriers, but also will publish advanced research results from those regions that have focused on regional and urban issues in Asia from different perspectives.

The series aims to expand the frontiers of regional science through diffusion of intrinsically developed and advanced modern regional science methodologies in Asia and other areas of the world. Readers will be inspired to realize that regional and urban issues in the world are so vast that their established methodologies still have space for development and refinement, and to understand the importance of the interdisciplinary and multidisciplinary approach that is inherent in regional science for analyzing and resolving urgent regional and urban issues in Asia.

Topics under consideration in this series include the theory of social cost and benefit analysis and criteria of public investments, socio-economic vulnerability against disasters, food security and policy, agro-food systems in China, industrial clustering in Asia, comprehensive management of water environment and resources in a river basin, the international trade bloc and food security, migration and labor market in Asia, land policy and local property tax, Information and Communication Technology planning, consumer “shop-around” movements, and regeneration of downtowns, among others.

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Euijune Kim • Brian H. S. Kim
Editors

Quantitative Regional Economic and Environmental Analysis for Sustainability in Korea

 Springer

Editors

Euijune Kim
Department of Agricultural Economics
and Rural Development and
Research Institute of Agricultural
and Life Science
Seoul National University
Seoul, Korea

Brian H. S. Kim
Department of Agricultural Economics and
Rural Development, Interdisciplinary
Program in Agricultural and Forest
Meteorology, and Research Institute for
Agriculture and Life Sciences
Seoul National University
Seoul, Korea

ISSN 2199-5974 ISSN 2199-5982 (electronic)
New Frontiers in Regional Science: Asian Perspectives
ISBN 978-981-10-0298-4 ISBN 978-981-10-0300-4 (eBook)
DOI 10.1007/978-981-10-0300-4

Library of Congress Control Number: 2016957509

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Printed on acid-free paper

This Springer imprint is published by Springer Nature
The registered company is Springer Nature Singapore Pte Ltd.
The registered company address is: 152 Beach Road, #22-06/08 Gateway East,
Singapore 189721, Singapore

Preface

Sustainable development, with its dual emphasis on the most recent concerns—development and environment—has different implications for several sections of society, professions, and practitioners in different fields of human endeavor and survival. It requires an extensive application and interdisciplinary method that should form the ingredients of comprehensive approaches to sustainable development. Rigorous theories have been advanced, relatively recently, in response to a growing trend and challenges posed in public policy in economic and environmental development. Economic science recognized nonlinearities in economic growth and environmental conservation and the critical role of environment and ecology in the managing of economic systems. It is therefore necessary to examine more real-life solutions to identified and potential problems that affect the welfare of the human society. However, sustainable development draws much of its significance, influence, and innovation from its very ambiguity. The concrete challenges of sustainable development are at least as heterogeneous and complex as the diversity of human societies and natural ecosystems. A dynamic and evolving idea that can be adapted to fit very different conditions and contexts across space and time allows redefining and reinterpreting the salient features of sustainable development.

New findings of extensive empirical research have posed several new challenges to our basic understanding of how regions develop, change, and grow. This book focuses on lately developed pioneering analytical tools for sustainable development with the application of regional economic and environmental issues in Korea. With a range of case studies, the authors here embraced a series of theoretical models and empirical methods including spatial CCE model, multiregional input–output and econometric analysis, logit model, GIS, contingent valuation method, sample selection model, machine learning technique, stochastic frontier analysis, Markov chain model, and panel analysis. These models and methods are tailored to spatial development and policy issues such as agglomeration, clustering and industrial innovation, human capital and labor market, education and R&D investments,

regional economic resilience for unexpected disaster, quarantine system and disease, and environmental degradation. These studies contribute to advocate alternative interpretations and policy guidelines and allow to observe changing patterns and binding constraints of sustainable development transition in Korea.

Seoul, Korea

Euijune Kim
Brian H. S. Kim

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Contributors

Taelim Choi Incheon Development Institute, Incheon, Korea

Ayoung Kim Department of Agricultural Economics, Purdue University, West Lafayette, IN, USA

Brian H. S. Kim Department of Agricultural Economics and Rural Development, Interdisciplinary Program in Agricultural and Forest Meteorology, and Research Institute for Agriculture and Life Sciences, Seoul National University, Seoul, Korea

Euijune Kim Department of Agricultural Economics and Rural Development and Research Institute of Agricultural and Life Science, Seoul National University, Seoul, Korea

Jae Hong Kim Department of Public Administration, School of Social Sciences, University of Ulsan, Ulsan, Korea

Changkeun Lee Research Institute of Advanced Materials, Seoul National University, Seoul, Korea

Jaewon Lim School of Public Policy & Leadership, Greenspun College of Urban Affairs, University of Nevada, Las Vegas, NV, USA

Up Lim Department of Urban Planning and Engineering, Yonsei University, Seoul, Korea

Kyung-Min Nam Department of Urban Planning and Design, The University of Hong Kong, Pokfulam Road, Hong Kong

JiYoung Park Department of Urban and Regional Planning, University at Buffalo, The State University of New York, Buffalo, NY, USA

In Kwon Park Department of Urban Administration, University of Seoul, Seoul, Korea

Marc Wolfram Department of Urban Planning and Engineering, Yonsei University, Seoul, Korea

Dong Keun Yoon Department of Urban Planning and Engineering, Yonsei University, Seoul, Korea