Chapter 7

Conclusion and Policy Recommendations

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The results of additional simulations based on other scenarios are introduced in Appendix E.

7. Conclusion and Policy Recommendations

The third-generation IDE/ERIA-GSM is a cutting-edge economic model that incorporates realistic geography and modal choice. Various analyses show that the economic impacts of logistic infrastructure developments are quite complicated and differ significantly by industry. Therefore, the development should be carefully planned and, for that purpose, an analytical model like IDE/ERIA-GSM has much to
We propose three general policy recommendations.

7.1. Minding the income gap in the developing phase of the economy

The third-generation IDE/ERIA-GSM confirms that infrastructure development will benefit most regions along corridors and near ports and airports. However, large-scale infrastructure development may widen the gaps, i.e., the richer regions may become richer and the poor regions may become poorer. In particular, intranational economic gaps may widen during the phase of economic development, given the restrictions on the mobility of the international labor force.

Thus we should be very cautious when considering regional infrastructure development. The economic improvement of all involved regions is not a given. In addition, infrastructure development might create winning industries and losing industries within a region. The economic effects of infrastructure development are quite complicated and not easily predictable without proper analytical tools. IDE/ERIA-GSM is such a tool and contributes to sound evaluation and prioritization of certain types of planned infrastructure development projects.

7.2. Need to consider modal shift by infrastructure development

The test simulations presented in this paper revealed that an infrastructure development project might lead to quite drastic modal shifts for certain origin-destination combinations. As a result, there is a possibility of under- or overunitization of specific loads/ports/airports.
We thus need to plan infrastructure development projects while considering all modes of transport. In addition to that, the regions affected by an infrastructure development project are often wider than one can imagine. Thus, it is a sensible policy option to establish an international body to coordinate regional transport infrastructure development projects. Again, an economic model with realistic geography and modal choices like IDE/ERIA-GSM has a role to play in predicting possible modal shifts triggered by transport infrastructure development projects.

### 7.3. Establishment of a geographical economic and social database in East Asia

IDE/ERIA-GSM is a complex system; it is hard to predict without accurate data and a solid simulation model. We need to develop IDE/ERIA-GSM further as well as facilitate the coordination of a geographical statistical system among the member countries of the Economic Research Institute for ASEAN and East Asia (ERIA).

To conduct more accurate simulations with richer implications, more precise regional economic and demographic data are required at the subnational level in each country and at the subprovincial level in China and India. The establishment of uniform territorial units for geographical statistics like the Nomenclature of Territorial Units for Statistics (NUTS) in the European Union (EU) is needed. We need harmonized data as well as harmonized data collection methods in East Asia. ERIA is a suitable body to conduct capacity building for officials in national corridors connecting regions.

We also need more precise data on routes and corridors connecting regions. Information on the main routes between cities, times, and modes of transport (road,
railway, sea, and air) appears indispensable. Data on border costs such as tariffs and nontariff barriers due to inefficient customs clearance seem crucial.

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