



ELSEVIER

Regional Science and Urban Economics 32 (2002) 311–338

regional  
SCIENCE  
& urban  
ECONOMICS

[www.elsevier.com/locate/econbase](http://www.elsevier.com/locate/econbase)

## Trade, rural–urban migration, and regional income disparity in developing countries: a spatial general equilibrium model inspired by the case of China

Dapeng Hu\*

*Zell/Lurie Real Estate Center, The Wharton School, University of Pennsylvania, PA, USA*

Received 15 June 1999; received in revised form 28 November 2000; accepted 6 December 2000

---

### Abstract

Inspired by the case of China, this paper develops a spatial agglomeration model to explain the increasing regional disparity in China and explore several policy implications. The model shows that the improving trade condition and the increasing rural-to-urban labor mobility in China may be the reasons for the enlarging income gap between the coastal area and the hinterland. With a geographical advantage in international trade, the coast becomes the initial location for industrial agglomeration and its leadership becomes strengthened by the positive feedback mechanism from increasing returns to scale. The necessary labor supply for industrial agglomeration in the coast comes from intraregional rural-to-urban migration instead of interregional migration. As a consequence of the industrial agglomeration, the income disparity between the coast and the hinterland increases. The location disadvantage of the interior comes from higher transportation cost in international trade. However, the model suggests that increasing domestic accessibility can actually make the interior worse off. © 2002 Elsevier Science B.V. All rights reserved.

*Keywords:* Agglomeration; Regional disparity; Chinese economy; Spatial equilibrium model

*JEL classification:* R12; F12; O18.

---

---

\*CitiMortgage, Inc., 12855 N. Outer Forty Dr., MS 822, St Louis, MO 63141, USA. Tel.: +1-314-851-6204; fax: +1-314-275-5115.

*E-mail address:* [dapeng.hu@citicorp.com](mailto:dapeng.hu@citicorp.com) (D. Hu).

## 1. Introduction

Along with new opportunities in economic growth has come the problem of increasing regional disparity in a growing number of developing countries. In China, for example, the income gap between the coastal provinces and the hinterland has grown fast since the country opened its doors in the early 1980s. At the same time, there was a rapid agglomeration of manufacturing in the coast. Empirical studies have suggested that the surge in international trade and foreign direct investment (FDI) and the significant increase of rural-to-urban labor mobility may be important factors for manufacturing agglomeration and regional income disparity (Fujita and Hu, 2001). In this paper, we set up a spatial general equilibrium model to explain how globalization and rural–urban migration may affect regional disparity in developing economies. We focus on exploring the policy implications of the model.

Early literature in economic development (Hirschman, 1958) has described the changes in regional disparity as an inverted U-curve (the Kuznets curve). As stressed by Williamson (1965), ‘regional income differentials increase in early development stages, then stabilize, and then diminish in mature periods of growth.’ One essential assumption behind the inverted U-curve is that increasing returns to scale lead to the fast growth of certain regional centers of economic strength, which was termed the ‘polarization process’ in Hirschman (1958):

‘On the other hand, several unfavorable or polarization effects are also likely to be at work. Comparatively inefficient, yet income-creating, Southern activities in manufacturing and exports may become depressed as a result of Northern competition . . .

A most serious, and frequently observed, polarization effect consists in the kind of internal migration that may follow upon the economic advances of the North. Instead of absorbing the disguised unemployed, Northern progress may denude the South of its key technicians and managers as well as of the more enterprising young men.’

Because of the difficulties in modeling market structures of non-perfect competition, these ideas were not formalized into a general equilibrium framework until recently. Starting from Fujita (1988) and Krugman (1991), recent literature in spatial agglomeration modeling tries to formalize these ideas in a spatial general equilibrium framework. In this line of research, production agglomeration can be explained as a result of increasing returns in manufacturing or services sectors. For a detailed review of the literature, see Fujita and Thisse (1996). The agglomeration models were extended into three-location frameworks to explore the effects of international trade on regional development (see, for example, Krugman and Elizondo, 1992). However, most existing literature focuses on production agglomeration while little of it addresses the income disparity issue directly. Note that production agglomeration does not necessarily imply regional income disparity in per capita terms. Even in the core-periphery structure that is

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات