The Spatial Division of Labor in the Knit Garment Industry with a Central Focus on the Eastern Part of Tokyo: Analysis of Inter-firm Communication

January 2014

Kimiko ENDO

The Spatial Division of Labor in the Knit Garment Industry with a Central Focus on the Eastern Part of Tokyo: Analysis of Inter-firm Communication

A Dissertation Submitted to the Graduate School of Life and Environmental Sciences, the University of Tsukuba in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy in Science

(Doctoral Program in Geoenvironmental Sciences)

Kimiko ENDO

ABSTRACT

This study focused on the knit garment industry in the eastern part of Tokyo as a fast-moving consumer goods sector. The structure of linkages between knitted garment manufacturers and their trade partners (customers, subcontractors and their own branch plants) was analyzed with the aim of identifying the role of industrial agglomeration in metropolitan areas based on an understanding of the industry's overall spatial production system, which has now expanded across national borders.

The results of the study showed that although the industry has undergone geographical decentralization caused by technical innovation such as the progress of remote communication tools, its dependency on face-to-face contact based on locational proximity has been maintained. This is evidenced by the following findings: 1) Knitted garment manufacturers are more than just subcontractors to their customers (apparel firms and the like); they also play a role in assisting customer product development processes such as fashion design and material selection/production. These manufacturers also share tacit knowledge through face-to-face communication with their customers and material brokers. 2) Knitted garment manufacturers demand quick access to a variety of partial processors within the agglomeration area because the industry requires various types of processing and a quick delivery system for small-lot items/semi-finished products.

The distance of Tokyo operators from branch plants or subcontractors in non-metropolitan areas of Japan or overseas is partially mitigated by electronic transmission of CAM or pattern data, e-mail/telephone communication and so on. However, for the checking of factory lines or material quality, liaison is periodically needed to arrange face-to-face meetings.

Additionally, when normal orders are placed, mutual understanding based on a history of business relations and direct contact allows smooth communication. To build such mutual understanding with overseas factories, close attention must be paid to linguistic environments, ethnic senses of values and labor conditions due to the culture and distance barriers involved. The study results thus indicated that knitted garment manufacturers play a significant role in reducing transaction costs in the worldwide division of labor. It therefore became clear that despite a weakening of industrial agglomeration in the eastern part of Tokyo with regard to manufacturing function in terms of mass production, the industry has continued to play an important role for manufacturing systems through design assistance, low-volume and quick-delivery production, and organization of production even in the face of intensifying inter-regional and international competition.

Keywords: external economies, face-to-face communication, tacit knowledge, transaction costs, spatial division of labor, cultural distance, the eastern part of Tokyo