

## Book Review

*Global Taiwan: Building Competitive Strengths in a New International Economy*. Edited by Suzanne Berger and Richard K. Lester. Armonk, N.Y.: M. E. Sharpe, 2005.

A considerable body of research exists that has attempted to explain the remarkable speed and level of technological development among firms in Asia's newly industrialized economies, particularly Taiwan and South Korea. Since the 1990s, Taiwan has been a major hub in the global production networks of many high-technology industries. Moreover, with the emergence of the "Third World" transnational corporations in Taiwan and South Korea, the second-tier newly industrializing countries, such as China and Malaysia, are now increasingly drawn to the orbit of these firms' operations. Consequently, *Global Taiwan* is a welcome book that contributes to a better understanding of Taiwan's economy and the path of technological development for other East Asian latecomers.

The book, divided into eight chapters, focuses overwhelmingly on the development of the electronics industry, with two chapters on the automotive and apparel industries, respectively. The book's strength is the variety of views that it presents, but it lacks a set of core arguments that run throughout the chapters. It is a collection of the work of scholars who participated in the globalization research project at MIT's Industrial Performance Center. The authors adopt an "open pathways" approach, which refers to various ways in which firms combine legacies of their origins and past experiences with new resources that are acquired in the open world economy (p. xix). This approach may not be particularly new; in fact, as a study of firms, it is rather conventional in its use of resource-based theory, in which firms are viewed as institutions with permeable and highly blurred boundaries, or "networks

within networks," rather than simply legally bounded entities and owners of property assets.

The first chapter outlines the key issues of globalization for Taiwan's industries. One axis of inquiry is whether Taiwanese firms can upgrade technologically and stay on the island or expand to offshore investment. In Chapter 2, Timothy Sturgeon and Ji-Ren Lee present a pessimistic outlook for the Taiwanese electronics industry and the development of ODM (Original Design Manufacturing), in that they predict that new modulization techniques will allow North American EMS (Electronics Manufacturing Service) firms to outcompete Taiwanese ODM firms by flexibly switching their capabilities to other sectors and therefore expanding with little cost. In Chapter 4, Edward Cunningham, Teresa Lynch, and Eric Thun express the same concerns about the evolution of Taiwan's industries on the basis of a study of the automotive industry and warn that Taiwanese firms cannot weather the storm of global competition unless they move their operations to low-cost locations, such as China. The authors of these chapters agree that Taiwanese firms must take advantage of global production networks and invest in research and development to upgrade technologically, so they can stay in Taiwan and expand, rather than relocate to China.

Moving to China would involve not only economic development issues for Taiwan, but also national security concerns. Chapters 5, 6, and 8 raise this critical issue to its highest point. Douglas Fuller argues that Taiwanese electronics firms must upgrade, develop their own brand products, and engage in product design and marketing. In the meantime, Taiwanese firms can exploit their cultural affinities to China, although they will trade off the advantages of geographic diversification and raise national security concerns. In Chapter 6, Marcos

Ancelovici and Sara Jane McCaffrey discuss the failure of Taiwanese textile firms to shift their operations to Mexico and to exploit the benefits of the North American Free Trade Agreement to enter the U.S. market, whereas their relocations to China have been far more successful. The authors therefore emphasize the limited nature of the globalization strategies that Taiwanese firms have adopted. In the final chapter, Edward Steinfeld argues that the transfer of technology to China by Taiwanese firms would not entirely erode Taiwan's competitive advantage, since most of the crucial components would still be controlled by Taiwan and the tacit dimensions of technology are not easily learned. Moreover, the key to solving the dilemma of cross-Strait integration resides in the research and development (R&D) capability of firms, which, in the case of Taiwan, is closely related to the state's capacity.

The state functions as a collective agent for Taiwanese firms, the majority of which are small and have difficulty initiating new processes and developing products without subsidies. But state initiatives often result in failure. In Chapter 3, Douglas Fuller, Akintunde Akinwande, and Charles Sodini examine the performance of three electronics products and argue that industrial policy can succeed only if it corresponds with the position of Taiwan's economy in the global production networks (ladders). In Chapter 7, Dan Breznitz makes an additional distinction between the success of industrial policy in the integrated-circuit design sector and its failure in the software industry. The critical issue is not just state intervention, but the specific institutional arrangement and its fit with the nation's industrial environment.

In sum, the core theme of the book is the evolution of the Taiwanese production system, which is characterized by the ODM practice, in the cross-Strait integration. Locational shifts are viewed as a resource-mobilization strategy for firms to overcome the predicament of a labor shortage, at first, and then as a competence enhancement strategy to strengthen R&D and marketing capabilities. Thus, broadly speaking, this book fits the interests of the readers of *Economic Geography*.

In spite of its empirical richness, the book leaves out some critical issues, particularly those related to the challenges that come with the transition from ODM to OBM (Own Brand Manufacturing). The process seems to be taken for granted by the authors, but needs to be more explicitly addressed. In the ODM model, technological upgrading relies on learning by doing through collaboration with global buyers. However, to be competitive in the late 1990s, firms had to acquire firsthand knowledge of products aggressively and as early as possible and adapt their designs accordingly. This need prompted Taiwanese firms to set up R&D teams and marketing offices in core technology regions, such as the Silicon Valley. The connection to these technology hubs is the indivisible part of Taiwan's globalization project, yet unfortunately is ignored by the authors. Moreover, the transition to OBM has not come easy for latecomers like Taiwan. How can Taiwanese firms cultivate and maintain markets to avoid direct competition with their key buyers and achieve complementary coexistence? These issues will require additional studies and will provide a key missing piece of the picture of global Taiwan.

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