

Henry S. Rowen, Marguerite Gong Hancock, and William F. Miller (eds.), *Making IT: The Rise of Asia in High Tech*. Stanford: Stanford Univ. Press, 2007, xviii, 388 pp.

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The emergence of the information technology (IT) industry in Asia symbolizes both the growing share of the world's wealth coming from Asia and the diffusion of modern scientific and technological capabilities beyond the Atlantic region. The Asian IT industry also contains many of the critical nodes in the global production and innovation networks which are such important defining characteristics of the global economy. But, the rise of Asia as a major player in IT also raises many questions about scientific development, technological innovation, and political economy which this volume seeks to answer. As presented by editor Henry S. Rowen in his introduction to this interesting book, these include:

Why has Asia emerged so strongly in this industry? What were the similarities and the differences in the strategies used among these countries? What accounts for their different specializations? How did their firms and government decide what to make and how to make it? Why have companies clustered in particular localities? ... What roles have various institutions played—governments (national and local), universities, research institutes, financial institutions, legal professions, and so forth? (p. 2)

To advance our understanding of these issues, the Stanford Project on Regions of Innovation and Entrepreneurship (SPRIE) of the Walter H. Shorenstein Asia-Pacific Research Center at Stanford organized a series of seminars beginning in

2002 to bring together national experts from Asia to address IT development in their countries. *Making IT* presents the reports of these specialists, along with a set of crosscutting thematic analyses comparing the national experiences.

Following Rowen's overview chapter, the book is divided into four parts. The first, on Japan as "Early Developer", is then followed by three chapters on Taiwan, Singapore and Korea under the rubric of "Three Asian IT Tigers". Chapters on China and India constitute the third part, "The Recent Arrival of Two Giants". "Common Themes" are explored in the fourth part with useful chapters on the role of governments in shaping IT industries, the nature of venture capital in Asia, and a comparative assessment of university industry relations in Asia and the US. Missing from the study, curiously, is a discussion of Malaysia as a site for both foreign investment in IT and ambitious indigenous development efforts by the government.

Comparisons with the US inform much of the volume, with Silicon Valley being taken as the paradigm case of regional IT development, venture capital, and high-tech entrepreneurship. Industrial clustering is thus an important theme in each of the country chapters, especially those on Taiwan, Korea and China where the discussion is organized around the Hsinchu Science-based Industrial Park, Daeduk Science Town and Tehran Road (named for Seoul's sister city in Iran) and Beijing's Zhongguancun respectively. Each of these chapters are fine case studies that pull together much of what is known about the evolution of these regional development experiences. The juxtaposition of the paradigm case and Asian experience is especially interesting in discussions of innovation and entrepreneurship, clustering, and industry start ups in the chapters by Ken-ichi Imai and Noboru Maeda on Japan, given its efforts to reorient its national innovation system following its prolonged economic slump in the 1990s.

In attempting to identify common features explaining successful IT development, the book identifies the importance of positive economic growth policies and active government promotion of IT in particular, a "strategic openness" to the international environment, the cultivation of a critical mass of scientists and engineers, access to foreign technology—and especially linkages to the United States—and financial system changes which opened the industry to equity, as well as the more traditional bank finance. Interestingly, in the period covered, universities played little role as sources of technology. Within these common features, however, there was considerable national variation, and it was only Japan which exhibited a capacity for indigenous innovation (and was less reliant on foreign technology) during the years of industrial development studied. This is sure to change, and indeed, already has. In their concluding reflections on what lies ahead, the editors rightly call attention to Asia's dynamic IT markets and the demands for innovation they generate, the prospects for further financial change and venture capital development (the current financial crisis, of course, was not anticipated), and the fact that the higher education and R&D systems in the region are rapidly increasing in capability.

Overall, the chapters in this book are of high quality. Changes in the Asian IT industry are fast-moving and it is not possible for a study such as this to include all the latest developments. Nevertheless, it offers stimulating, informative, and authoritative accounts of the enduring issues that affect IT in the region. The volume should therefore serve as an important standard reference in what has become a very large literature on the subject, and would be a very useful addition in advanced courses on Asian political economy and high-tech industrial development.