Emergent Economies, Divergent Paths: Economic Organization and International Trade in South Korea and Taiwan. By Robert C. Feenstra and Gary G. Hamilton. Structural Analysis in the Social Sciences series, vol. 29. Cambridge and New York: Cambridge University Press, 2006. Pp. xii, 462. $85.00. ISBN 0–521–62209–3.

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The authors of *Emergent Economies, Divergent Paths* are one of the world's leading economists in the area of international trade and one of the world's leading economic sociologists. Both have written extensively on the subject of East Asian economies, including a number of joint papers that are incorporated into this book and extended by it.

The economies of South Korea and Taiwan in the second half of the twentieth century are to scholars of economic development what the economy of Britain in the second half of the eighteenth century and first half of the nineteenth century is to economic historians. There will always be a market for a fresh, original explanation for the development paths of post-1950 South Korea and Taiwan. The ambitions of the authors go beyond this, however. They want to use these two cases to reshape the way economists, economic sociologists, and political scientists think about economic organization and its interaction with international trade.

In my view this book makes three main contributions: (1) integration of business groups into a monopolistic competition, general equilibrium model; (2) articulation of an augmented view of the role of intermediaries in international trade in which they do not merely facilitate the flow of goods but actually cause industrialization in less developed countries; and (3) revision of the economic history of South Korea and Taiwan in light of applications of (1) and (2) to South Korean and Taiwanese data. The first contribution is mainly accomplished in part 1, the second contribution is accomplished in part 2, and the revision of South Korean and Taiwanese economic history is woven throughout the book.

Sharon Belenzon and Tomer Berkovitz (2008) define business groups as an organizational form in which at least two legally independent firms are controlled by the same ultimate owner. For fifteen European countries, they use the Amadeus ownership database to identify groups, defining control as at least 50 percent of the voting rights for privately held firms and at least 20 percent of the voting rights for publicly held firms. They find that 52 percent of the firms in their data with fifty or more employees and at least $1 million in annual sales are affiliated with business groups. Given their importance, it is somewhat surprising that Feenstra and Hamilton appear to have made the first significant attempt to integrate business groups into any type of fully specified general equilibrium model, beginning with their earlier papers on which part 1 of this book is based. One can speculate that this has been partly due to the lack, until recently, of data necessary to identify groups outside of East Asia and partly due to the fact that business groups are relatively unimportant in the United States.

In the model that Feenstra and Hamilton present in chapter 3, upstream firms produce varieties of an input using labor and downstream firms use these input varieties and additional labor to produce varieties of a final good. The final good is traded and the inputs are nontraded. Final demand is CES in varieties and downstream production functions are Cobb–Douglas in labor and CES aggregates of input varieties. All firms are identical, and it would be possible to model all of them as monopolistically competitive, each producing one variety, charging a constant markup over marginal cost, and earning zero profits. However, there exist classic gains from vertical integration between downstream and upstream firms that would allow the former to purchase input varieties from the latter at marginal cost. A business group is precisely a set of firms that transact in this manner and incur a governance cost in order to enforce these efficient, implicit contracts between the upstream and downstream firms in the group.

Now note that, if there are few groups in equilibrium, each has an incentive to mark up the prices it charges for its input varieties to the *other* groups substantially since it can significantly affect their downstream competitiveness. However, this gives each group an incentive to become more vertically integrated, leading to fewer groups. An equilibrium with many groups has the same self-reinforcing logic. There is the possibility

of multiple equilibria, which are shown to exist under certain parameter values. As just noted, the key distinction is between high concentration and low concentration equilibria. Within these, however, there are cases where unaffiliated downstream firms can enter, in which case business groups dominate upstream and vice versa.

High and low concentration equilibria differ in empirically measurable characteristics: vertical integration, measured by the ratio of internal (within-group) sales to total sales; horizontal diversification (within-group product variety), measured by the Herfindahl index using sector shares of sales; and economywide product variety, measured by number of varieties of final products. Vertical integration and horizontal diversification are higher in high-concentration equilibria and economywide product variety is lower.

The main point of chapter 4 is that South Korean business groups (*chaebol*) have higher internal sales ratios and greater within-group product variety than Taiwanese business groups. The differences are dramatic, with the largest groups in Taiwan having a degree of vertical integration only one-half as high as their South Korean counterparts. The comparison of economywide product variety is postponed to chapter 8 in order to allow presentation in the intervening chapters of the export data used for its measurement, at which point it is found that Taiwan has greater product variety than South Korea despite somewhat smaller GDP. In sum, South Korea and its business groups fit the characteristics of a high-concentration equilibrium and Taiwan and its business groups fit the characteristics of a low-concentration equilibrium.

Chapter 5 (actually the beginning of part 2 of the book) answers the question of how South Korea wound up in a high-concentration equilibrium and Taiwan in a low-concentration equilibrium. As the authors note, at the start of industrialization the Taiwanese state was even more firmly in control of business than the South Korean state, yet Taiwan followed the less centralized path. They focus on the influence of primogeniture in South Korea versus multigeniture in Taiwan, which remarkably continues in the inheritance practices for the business groups to this day.

Emergent Economies, Divergent Paths is thoroughly convincing on the centrality of business groups to understanding economic organization in South Korea and Taiwan, and on their business groups differing in ways that are well described by the high- and low-concentration equilibria of the chapter 3 model. A minor criticism is that the listings of business groups in the empirical tests of chapter 4 are taken from country sources without explanation of how those sources identified the groups. More importantly, the static, general equilibrium approach to business groups necessarily abstracts from one of the most interesting aspects of the groups: how they grow. Michael L. Gerlach and James R. Lincoln (2000), for example, show how the Japanese *keiretsu* expand through continuous spin-off of satellite firms. In this context, it should be noted that most authors do not cite vertical integration as the driving force behind business groups.

In fact, the most popular current approach to integrating the make or buy decision into general equilibrium is that of Gene M. Grossman and Elhanan Helpman (2002), who never mention business groups. A great advantage of their approach is that it has proven tractable and therefore widely applicable, as Pol Antràs (e.g., 2005) and others have shown. Feenstra and Hamilton find the equilibria of their model using simulations. Their desire to capture the richness of the South Korean and Taiwanese cases works against the usefulness of their business group model for other purposes.

Chapters 6 and 7 contain the core of Feenstra and Hamilton's contribution regarding the primary role of intermediaries in South Korean and Taiwanese industrialization. Chapter 6 begins with a description of the "retail revolution" in the United States. Their description of the rise of low-price retailing giants in concert with regulatory changes and suburbanization makes great reading. These giant retailers began to organize manufacturing, especially overseas where labor was cheap, enabling them to realize the pithy motto, "We don't sell stuff, we buy stuff for consumers" (quoted on p. 234). This development in retailing was the counterpart, indeed the necessary condition according to Feenstra and Hamilton, for the conversion of manufacturing from "sell what we make" to "make what we sell" that became the hallmark of South Korean and Taiwanese manufacturing starting in the 1960s.

These manufacturers did not sell their own brands but rather produced under OEM or private label contracts.

Chapter 7 describes how trading companies, first Japanese and later domestic, linked South Korean and Taiwanese manufacturers to big U.S. retailers. The difference between high and low concentration equilibria was evident in the failures of South Korean government efforts to use trading companies to stimulate more exports from small- and medium-sized enterprises and Taiwanese government efforts to develop large trading companies. On the other hand, the *chaebol* were ideally suited to the "Big Push" into heavy and chemical industries initiated by the South Korean government in the mid-1970s. The *chaebol* organized and controlled production networks, whereas in Taiwan these were "embedded" in Chinese norms of reciprocity (social networks) and not controlled by any lead actor. As described in chapter 8, their high concentration ultimately allowed the top c*haebol* to break free of dependence on U.S. retailers, market under their own brand names, and raise their export unit values.

One could see Feenstra and Hamilton's argument for the necessity of the U.S. retail revolution to the rapid industrialization of South Korea and Taiwan as a supercharged version of the learning by exporting explanation for higher productivity of exporting firms, which has been locked in a seesaw battle with the selection explanation for the last two decades. This would unfairly neglect the strong role that changes in economic organization play in their argument. This role could have been brought out more clearly by a formal model, as was done in part 1.

Though *Emergent Economies, Divergent Paths* synthesizes a number of published articles, it winds up being an outstanding and freestanding original piece of research in economics, economic history, and economic sociology. It is must reading for any specialist in East Asian economies, and very strongly recommended for anyone with an interest in industrial organization in general equilibrium and international trade.

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The Invention of Enterprise: Entrepreneurship from Ancient Mesopotamia to Modern Times. Edited by David S. Landes, Joel Mokyr, and William J. Baumol. Kaufman Foundation Series on Innovation and Entrepreneurship. Princeton and Oxford: Princeton University Press, 2010. Pp. xiii, 566. $49.50. ISBN 978–0–691–14370–5. *JEL 2010–0599*

The Invention of Enterprise: Entrepreneurship from Ancient Mesopotamia to Modern Times is not a history of entrepreneurship. Instead, it is an assessment of entrepreneurship at different times and places in history. The editors, David Landes, Joel Mokyr, and William Baumol, have taken on the difficult challenge of compiling the first survey of the extant knowledge about entrepreneurship across a variety of civilizations. This endeavor is especially ambitious given that our present understanding of entrepreneurship is highly variable from one society to the next. For example, we know far more about nineteenth century United States inventors than about domestic financial institutions in colonial India. The result is a dense book that, on the one hand, is a testament to the importance of entrepreneurship across different types of societies, but is occasionally uneven in the depth and nature of those insights.

The diversity of settings covered in the volume is astounding. Its eighteen chapters walk the reader from Babylonia and Antiquity all the way to the modern United States and China. Along the way, we visit the Christian and Muslim Middle Ages and review the emergence and development of capitalism in Western Europe, India,