eration. The rest of the book, another six chapters, is a wide-ranging and highly idiosyncratic re-exposition of a variety of spatial agglomeration models. These are all static models, but in chapter 11 the authors venture into several recent contributions that have sought to integrate agglomeration with endogenous growth theory.

The models reviewed in chapters 6–11 can be grouped into two classes: models in which market agents are perfectly competitive, and models based on monopolistic competition. The first category includes models developed by, among others, Robert M. Solow and William S. Vickrey 1971, "Land Use in a Long Narrow City," *J. Econ. Theory*, 3,4:430–447; Eli Borukhov and Oded Hochman 1977, "Optimum and Market Equilibrium in a Market Equilibrium Model of a City Without a Predetermined Center," *Environment and Planning*, 9:849–856; and Robert E. Lucas 2001, "Externalities and Cities," *Rev. Econ. Dynam.*, 4:245–274. In these models, agglomeration results from non-pecuniary interactions or technological externalities among the price-taking agents.

In chapter 2, the authors make an extensive, almost passionate argument dismissing the relevance of the Arrow-Debreu competitive framework for understanding agglomeration. Within this framework, however, agglomeration can be generated by assuming that the consumer chooses only one home location but has concave preferences over all traded goods. Since each location is perceived as offering a different basket of traded goods, the consumer locates accessibly with respect to all locations. In realistic bounded geographies, this results in some locations becoming central, commanding higher rents on land and having higher densities of firms and consumers (Anas and Rong Xu 1999, "Congestion, Land Use and Job Dispersion: A General Equilibrium Model," *J. Urban Econ.*, 45:451–473).

The monopolistic competition models are based on the Dixit-Stiglitz model of product variety (Avinash Dixit and Joseph E. Stiglitz 1977, "Monopolistic Competition and Optimum Product Diversity," *Am. Econ. Rev.*, 3:297–308), adopted by Krugman as the basis for the "new economic geography" (e.g., most recently, Masahisa Fujita, Paul Krugman and Anthony Venables 1999, *The Spatial Economy: Cities, Regions and International Trade*, Cambridge, MA: MIT Press). In this framework, the same product produced at different locations would be perfect substitutes but, by assumption, firms are prevented from producing the same variety at more than one location (i.e., multi-plant firms are banned), necessitating intensive trade of all products among all locations. Meanwhile, there are agricultural regions with immobile consumers who must be served by firms while other consumer-workers are mobile and move with the firms. Hence firms concentrate in one or several agricultural regions to form large home markets of mobile workers when the cost of serving the other agricultural regions is not too high.

There continues to be considerable ambiguity and confusion about the role of monopolistic competition in explaining agglomeration. The authors state, for example that it is pricing above marginal cost that allows firms to compete for land (p. 218). In perfect competition with all inputs variable, firms price output at marginal cost (no markup) and pay land the value of its marginal product. Central land is closer to customers and more expensive. It is rendered affordable by substituting other factors for land, not by a markup.

One can also ask whether markup pricing is necessary to explain why producers want to get close to customers. The incentives for proximity based on transport cost considerations remains when the firm is perfectly competitive. As long as the consumers demand products from firms at all locations, agglomeration could develop even without markup pricing. This drives up the equilibrium density of firms and of employed labor and raises land rents in the center of the customer distribution. These effects are all too central in spatial economics but are obscured by the authors' strict adherence to the assumption that agents' demands for land are perfectly inelastic.

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Z Other Special Topics

Trust and Trustworthiness. By Russell Hardin. New York: Russell Sage Foundation, 2002. Pp. xxi, 234. $32.50. ISBN 0–87154–342–7.

JEL 2002–1256

Trust and Trustworthiness is based on a series of papers presented by the author at various academic conferences on trust and related issues.

The book is structured in two parts, covering basic concepts and extensions, respectively.

The first four chapters present the basic conceptual framework. Chapters 1 and 2 introduce the concepts of trust and trustworthiness, respectively. Chapter 3 compares the author's notions of trust and trustworthiness to alternative conceptions (and misconceptions). Chapter 4 deals with distrust and its asymmetries with respect to trust.

The last four chapters present extensions and further elaboration on the basic concepts: the epistemology of trust; managing trust; trust and government; and trust and society.

The central concept in the book is the notion of trust, which the author equates with the notion of "encapsulated interest." According to this notion, "I trust you because I think it is in your interest to take my interests in the relevant matter seriously in the following sense: You value the continuation of our relationship, and you therefore have your own interests in taking my interests into account" (p. 1).

There are thus two important elements in the notion of encapsulated interest: commonality of interests and (the potential for) a continuing relationship.

Trustworthiness, in turn, is the likelihood that you will be motivated to follow my interests. The author assumes that this motivation may result from internal inducements (character, habit), external inducements (various societal and institutional devices), or a combination of both.

There is an interesting parallel between the author's notions of trust and trustworthiness and the game theory literature on repeated games and reputation. For a long time, economists have understood self-enforced contracts as the equilibrium of a repeated game. The idea goes back at least to Schelling (who, as the author states, proposes a very similar notion of trust), and continued with the work of Klein and Leffler and many others. In other words, encapsulated interest is like the subgame of a repeated game starting next period.

The comparison to the game theory literature also extends to the work on reputation. According to the "gang-of-four" view (Kreps, Milgrom, Roberts and Wilson), my reputation is what other people think of me—formally, a Bayesian posterior. This bears some resemblance to the author's notion of trustworthiness, especially when the latter is based on interior traits (character, etc.). (In the game theory literature, the term "reputation" has been used indistinctly in reference to the repeated game, moral hazard, and the Bayesian updating models. Elsewhere, I have argued that the term "reputation" is more appropriate to describe the Bayesian, or adverse selection, paradigm, reserving the term "trust" to describe the repeated game equilibrium phenomenon. Hardin would likely agree with this distinction.)

The comparison to the game theory framework is also useful because it points to ways in which the author's work might be extended. For example, the implicit contract equilibrium can easily be extended to an implicitly social norm equilibrium involving many players. In the author's terminology, this would correspond to a multilateral notion of trust (whereas the book focuses mostly on unilateral trust relations).

Whatever the exact relation between the author's notion of trust and the notion implicit in the game theory literature, the reader of "Trust and Trustworthiness" will benefit from the extensive treatment of the idea of trust that the book provides. This includes insightful references to classical fiction (e.g., Dostoevsky, Tolstoi) , as well as more recent writers (e.g., Ishiguro); colorful references to classical music (e.g., Wagner), as well as more recent authors (e.g., Dylan); and a rich, interdisciplinary review of the more scholarly work on trust and trustworthiness (from theology to economics, from sociology to philosophy and many other fields).

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