Poverty and Inequality, in short, is divided between essays analyzing Sen's soft-core economic model of how to relate poverty to inequality, and essays positing competing sociological claims about the dominant structure shaping poverty and inequality. As Grusky and Kanbur might have predicted, the twain don't meet. They could have—Wilson, Massey, and Fineman are all talking about capabilities and the forces that allocate them, whereas Sen, Nussbaum, and Bourguignon are all talking about how to identify and measure structures that shape capabilities. But it is left to the reader to bring the disciplinary perspectives together—as so often happens in purportedly interdisciplinary classes, according to my students.

I promised a complaint about the lack of a political scientist in this rich mixture of scholarly perspectives. A political scientist would, or at least so I hope, have explicitly analyzed the role of power in allocating liberties, shaping markets, fostering or forbidding racial segregation. A political scientist could have addressed the steps needed to bring a capabilities checklist into the constitutional or legislative arena; he or she could have explicated the steps needed to move from political commitments to social justice or gender equality into concrete policies through mobilization and legislation. And so on. As I noted above, Grusky and Kanbur may have thought they were editing a book on the measurement of poverty and inequality but actually they were editing a book of different, albeit compatible, political agendas. A political scientist would, for better or worse, have made that clearer.

These are terrifically interesting essays by some of our finest scholars and most normatively committed thinkers. Individually they raise great questions; that they do not quite collectively sum to the goals set by the editors may say more about the difficulties of the goals than the quality of the authors or their chapters.

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Entrepreneurship, Growth, and Innovation: The Dynamics of Firms and Industries. Edited by Enrico Santarelli. International Studies in Entrepreneurship, vol. 12. New York: Springer, 2006. Pp. xx, 285. $89.95. ISBN 0–387–28868–6. *JEL 2006–1066*

The determinants of entrepreneurship and innovative activity and their role in the birth, growth, and decline of firms, and ultimately in economic growth, is one of the *classic* but still most fascinating and intriguing topics in economics. This is the subject of this book. Edited by Enrico Santarelli, the volume contains an introduction, by the editor, and thirteen chapters on empirical and theoretical aspects of industry dynamics. The editor and the chapter authors are economists from several European universities and research centers. Most of the contributors are part of the interesting network of researchers that has been created around the *Entrepreneurship, Growth and Public Policy Group* at the Max Planck Institute of Economics in Jena, directed by David Audretsch. As explained in the editor's introduction, the book has a Schumpeterian flavor and it is motivated by Schumpeter's idea that entrepreneurs (the "energetic types," as labeled by Schumpeter) play a crucial role in the dynamics and growth of market economies. Five chapters of the book focus on Gibrat's Law. Three chapters investigate the determinants of firm's survival. The causes and effects of entrepreneurial activity is the main topic of three chapters. The volume is completed with two policy-oriented studies: an evaluation of an *industrial district*, and a discussion of alternative public policies to promote innovation and entrepreneurship in Italy. Curiously, the volume does not contain any empirical study on market entry or on the creation of new firms and products. I also miss in this book some studies on patents and innovations. There is also a fair amount of overlap in the topics covered. A common feature of the empirical papers in this volume is that they are quite atheoretical. On the positive side, an interesting aspect of this volume is that the empirical studies examine ten different data sets from a number of countries, including Germany, Greece, Italy, the Netherlands, Portugal, Turkey, the United States, and the twenty-five member state of the European Union as a whole. Some of these data sets are very interesting and contain some unique features. Several chapters present new and interesting empirical results.

The first two chapters are the only theoretical studies in this book. In "A Market Model of Perfect Competition under Uncertainty," Yuri Kaniovski presents an evolutionary model of the dynamics of a competitive industry and derives its (unique) long-run equilibrium. The model has a very flexible specification of firm heterogeneity in capital intensity, labor productivity and entry and exit decision rules. Following the standard approach in *evolutionary models*, firms' entry and exit decision rules are ad hoc (i.e., not optimal or rational decision rules). This approach to industry dynamics, first introduced by Herbert Simon in the 1950s, can be useful to get certain understanding of some stylized facts such as Gibrat's Law. However, in my opinion, the use of ad hoc decision rules makes these models not very useful for policy analysis or even to obtain a deeper understanding of the role that specific technological or institutional factors play in the dynamics of a given industry. The chapter "Industry Dynamics a la Stackelberg with Stochastic Capital Accumulation," by Luca Lambertini, addresses the following question: is "moving first" a necessary and/or sufficient condition for a firm to become larger than its rivals? The author presents a dynamic oligopoly model where firms accumulate capacity through costly investment. In this model, a firm can be either a leader or a follower, and this exogenous characteristic is invariant over time. The paper shows that there are plausible cases in which followers' growth rates are larger than leaders'. Therefore, a "first-mover advantage" is neither a necessary nor a sufficient condition for a firm to become larger than its rivals.

A second group of papers in this book deals with testing *Gibrat's Law*. In "Gibrat's Law: An Overview of the Empirical Literature," Luuk Klomp, Santarelli, and Roy Thurik present a survey on sixty empirical papers testing *Gibrat's Law*. This "survey" is just a list of the sixty studies with very brief comments (three sentences) on the data, the econometric specification and the major findings. The chapter titled "R&D Intensity and the Relationship between Firm Size and Growth in Germany," by David Audretsch and Julie Ann Elston, argues very convincingly that the relationship between firm size and growth depends on institutional factors that can vary across countries, industries and over time. The authors present an empirical application for German firms where they show that a significant relationship between firm size and firm growth for all the industries considered. I find this empirical result very interesting, particularly because it contrasts with the findings of studies using data of North American firms, in which either Gibrat's Law holds or there exists a negative relationship between firm size and growth. Audretsch and Elston argue that the different relationship in the German case may reflect differences in institutions, such as the financial system. Testing this hypothesis would be an interesting idea for future research. In "Gibrat's Law in a Medium Technology Industry: Empirical Evidence for Italy," Francesca Lotti, Santarelli, and Marco Vivarelli propose an approach to test Gibrat's Law that takes into account not only the growth of incumbent firms but also the entry process (newborns) and the role of the selection mechanism associated with firm survival. The need to control for selection bias, when testing Gibrat's Law, has been recognized as an important issue in this literature at least since the works by Bronwyn Hall and by David Evans in the 1980s. Distinguishing between firm age and firm size has been also acknowledged as an important issue. Therefore, the approach that this paper proposes is not really original. Using panel data of Italian firms in the telecommunications equipment industry, the authors estimate by maximum likelihood a selection model that consists of a linear regression equation for firm growth on firm age and firm size and a selection (survival) equation that includes also firm size and age as explanatory variables. Given that the model does not have exclusion restrictions (i.e., variables that affect firm survival but do not affect firm growth), the identification of the model relies importantly on the functional form assumptions and in particular on the normality assumption for the distribution of the unobservables. Surprisingly, given the absence of exclusion restrictions, the authors obtain very precise estimates of the parameters in the firm growth equation. After controlling for selection bias and age, the authors still reject Gibrat's Law. However, they also find a convergence towards the validity of Gibrat's Law when firms age.

The analysis of the determinants of firm's survival is the topic of three of the chapters in this volume. In "Innovation Premium and the Survival of Entrepreneurial Firms in the Netherlands," Elena Cefis and Orietta Marsili

study how a firm's innovation affects its probability of survival. Using data of manufacturing firms in the Netherlands, the authors find that the returns of innovation, in terms of a higher survival probability, are particularly large for small entrepreneurial firms operating in low-tech industries. This finding is consistent with a view of innovation as an important strategic variable in oligopoly industries and with a limited role of spillover effects of innovations. The chapter titled "Foreign Presence, Technical Efficiency and Firm Survival: A Simultaneous Equation Model with Latent Variables Approach," by Helen Louri, Costas Peppas and Efthymios Tsionas, studies how the presence of foreign firms in an industry affects the survival probability of domestic firms in Greece. In principle, the impact of foreign presence is ambiguous. Foreign firms can bring superior technological knowledge that may increase the productivity and profitability of domestic firms. However, if foreign firms have lower costs, competition may induce the exit of the more costly local firms. The authors estimate Cox and Weibull versions of a duration model using data of 3,142 Greek manufacturing firms. The model includes firm characteristics such as size, age, capital intensity, financial structure, and technical efficiency (i.e., a residual from the estimation of a production function) and industry characteristics such as market concentration and foreign penetration. The main finding of the paper is that foreign presence increases the probability of exit of domestic firms. Therefore the competitive effect seems to be stronger than the technological spillover effects. In "Transferring the Risk of Failure: Entrepreneurship and Firm Dynamics in Turkish Manufacturing," Ali Gunes, Kenan Orhan, and Erol Taymaz study the mechanisms that entrepreneurs can use to transfer the risk of failure. Entrepreneurs can transfer risk to creditors (by using debt instead of equity), to investors (by renting or leasing buildings and equipment), and to workers (by lowering the fixed part of the salary and increasing the incentives or bonus part). The authors study how these three factors vary over the life cycle of new firms and with the probability of survival. They find a positive relationship between a firm's probability of exit and its use of bonuses, leasing/renting and debt, and interpret this relationship as evidence of the ability of firms to transfer part of the risk of failure to creditors, investors and workers.

Three of the chapters in this volume deal with the determinants of entrepreneurial activity. In "Entrepreneurship in the Old and New Europe," Isabel Grilo and Thurik study whether the propensity to entrepreneurial activities is different between the transition economies of Eastern Europe and the old members of the European Union. Following Schumpeter, the authors use the term *entrepreneurial energy* to refer to the propensity to entrepreneurial activity. The authors argue that the formation of new firms is the main driver of the transition from a centrally planned into a market-oriented economy. Therefore, entrepreneurial energy, which is a necessary ingredient in the formation of a new firm, is a key aspect in the transition process of these economies. The authors analyze cross-country differences in entrepreneurial energy by using a 2004 survey of 7,914 individuals from the twenty-five European Union members and the United States. They use two different measures of entrepreneurship: a latent self-assessed preference and the actual individual's choice of self-employment. According to this study, the most important difference in entrepreneurial energy between the eight former communist countries and the rest of the EU members is in the effect of the variable *risk tolerance.* While this variable has similar effects on latent entrepreneurship for the two groups of countries, the effect on the actual choice of self-employment is much larger in the transition economies. This seems to indicate that potential entrepreneurial energy is similar in both groups of countries but that the higher risks that entrepreneurs have to assume in transition economies is the main factor explaining the lower actual choice of self-employment. This is an interesting result with important policy implications. In "New Firm Formation and the Region: Empirical Results from the United States," Zoltan Acs examines regional variation in entrepreneurial activity across the United States. The main interest of the paper is in testing to what extent the rate of new firm formation in a region is positively correlated to the local supply of skilled labor. Perhaps not surprisingly, the author finds that local levels of educational attainment impact the firm formation rate for the types of firms that require better educated entrepreneurs, but they do not affect rates for business which are typically founded by individuals with low educational levels. The chapter titled "Entrepreneurship,

Industrial Re-Structuring and Unemployment in Portugal" by Rui Bautista, Andre van Stel, and Thurik looks at self-employment in Portugal in the period 1974 to 2002.

Finally, the volume contains two studies which are more policy oriented. In "Entrepreneurship, Innovation and the Evolution of Industrial Districts," Santarelli studies whether firms located in *industrial districts* generate more patents than similar firms which are not located in these industrial districts. This policy evaluation exercise is very complicated because a firm's decision to locate in an industrial district can be clearly endogenous (i.e., correlated with unobserved firm characteristics which affect the firm's innovative effort) and there are not obvious instruments for this variable. An alternative approach in the literature of policy evaluation is to use a *matching estimator*. The type of data in this study, with only thirty-four firms over a ten years period, makes this approach unfeasible. The empirical analysis in the study ignores this potential endogeneity problem and does not control for unobserved firm heterogeneity (firm fixed effects). For these reasons, the results of this study are not very convincing. The last chapter of the volume, titled "What is the Best Policy for Innovative Entrepreneurship," by Roberta Piergiovanni and Santarelli, discusses the effectiveness of alternative public policies to promote innovation and entrepreneurship in Italy.

Overall, this is a book worth reading for researchers and PhD students interested in empirical studies of industry dynamics and entrepreneurship. As I have commented above, several chapters present new and interesting empirical results. All the authors travel in the same research circles, so, unfortunately, there is a fair amount of overlap in the topics covered.

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Institutions and the Path to the Modern Economy: Lessons from Medieval Trade. By Avner Greif. Political Economy of Institutions and Decisions series. Cambridge and New York: Cambridge University Press, 2006. Pp. xix, 503. $80.00, cloth, $34.99, paper. ISBN 0–521–48044–2, cloth; 0–521–67134–5, pbk.

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Avner Greif's eagerly awaited book is ambitious, complex, long, and difficult. It will cause much work and trouble to reviewers. It will vex students for generations to come. This is in part because the volume actually contains two very different books which have been forcibly married, and which co-habit in domestic discord. The first book is a revision of that minor classic in the field of institutional economic history, Douglass North and Robert Paul Thomas's *Rise of the Western World* (1973). Here Greif attempts to locate the eventual rise of Western Europe to world dominance in its unique development of institutions that fostered economic growth, starting in the early middle ages. The second book is a long, deep, thoughtful, indeed brooding, meditation on the nature of social institutions in general, their stability, and their dynamics: *A Prolegomena to any Future Institutional Theory*. In this second work the specific institutions of medieval trade serve only as illustrations of proposed general principles.

Both of these are bold undertakings, but their combination in one volume creates unique difficulties. For those interested in the rise of Europe and the eventual Industrial Revolution the long sections of abstract rumination over the nature and underpinnings of institutions, such as chapter 2—a twenty-four page discussion of how we should define the term *institution*—will make the book at times an exquisite torture. Also, among the general principles Greif adduces in the theoretical sections is that there is no simple mapping between explicit institutional rules and the actual operation of institutions. Institutions are subtle forms whose real functioning cannot be discerned without a deep knowledge of their context and history. This theoretical conclusion cuts against the parts of the book which attempt a quick and superficial link between European trade institutions and European economic success.

For those interested instead in the origin, stability, and evolution of institutions the book may serve better. But for them the specific trade institutions cited as examples will not be the best material, since the details of the operations of these institutions and of their origins in tenth century Europe are sketchy, so that the empirical tests of any of the propositions advanced in the