Book Reviews

Editor’s Note: Guidelines for Selecting Books to Review

Occasionally, we receive questions regarding the selection of books reviewed in the Journal of Economic Literature. A statement of our guidelines for book selection might therefore be useful.

The general purpose of our book reviews is to help keep members of the American Economic Association informed of significant English-language publications in economics research. We also review significant books in related social sciences that might be of special interest to economists. On occasion, we review books that are written for the public at large if these books speak to issues that are of interest to economists. Finally, we review some reports or publications that have significant policy impact. Annotations are published for all books received. However, we receive many more books than we are able to review so choices must be made in selecting books for review.

We try to identify for review scholarly, well-researched books that embody serious and original research on a particular topic. We do not review textbooks. Other things being equal, we avoid volumes of collected papers such as festschriften and conference volumes. Often such volumes pose difficult problems for the reviewer who may find herself having to describe and evaluate many different contributions. Among such volumes, we prefer those on a single, well-defined theme that a typical reviewer may develop in his review.

We avoid volumes that collect previously published papers unless there is some material value added from bringing the papers together. Also, we refrain from reviewing second or revised editions unless the revisions of the original edition are really substantial.

Our policy is not to accept offers to review (and unsolicited reviews of) particular books. Coauthorship of reviews is not forbidden but it is unusual and we ask our invited reviewers to discuss with us first any changes in the authorship or assigned length of a review.

A General Economics and Teaching


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Over the centuries, international trade and the location of economic activity have been at the forefront of economic thought. Even today, free trade, globalization, and urbanization remain as commonplace topics in the popular debate as well as in scholarly analyses. Traditionally, trade theory and economic geography evolved as separate subfields of economics. More recently, however, they have become more and more united through new theoretical insights, which emphasize that the same basic forces simultaneously determine specialization across countries for a given international distribution of factors of production (trade theory) and the long-run location of those factors across countries (economic geography).

Scientific background on the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 2008
This quotation could well feature in the back cover blurb of the book *Economic Geography* by Pierre-Philippe Combes, Thierry Mayer, and Jacques-François Thisse. Indeed, this book should be compulsory reading for those interested in knowing more about the motivation or in contributing to further development of the long-standing research tradition behind Paul Krugman’s Nobel Prize.

The book is organized in three parts. Part 1 presents some basic facts on the spatial distribution of economic activities and the modeling conundrums that have kept spatial issues away from mainstream economics for a long time. At the same time, it discusses how the methodological solutions to those conundrums, proposed since Krugman’s seminal contributions in the 1980s and early 1990s, are, by themselves, responsible of the current divide between the ensuing “geographical economics” on the one side and “economic geography proper” on the other. From an economist’s point of view, the issue is simple enough and can be related to what the authors call “The Breakdown of the Competitive Paradigm in a Spatial Economy” (section 2.4). The main idea is that nontrivial location choices arise when people and firms are forced to choose an “address” and this choice affects their utility and profitability. Two features are needed for this to happen. First, there must be some indivisibility in the way people and firms can spread their consumption and production activities across space. Second, there must be some transaction cost when consumption and production activities are geographically separated. When this is the case, the competitive paradigm breaks down whenever alternative consumption and production sites are indistinguishable in terms of their exogenous characteristics. In these circumstances, the perfectly competitive equilibrium either does not exist or it is associated with the agglomeration of all people and firms in the same place. More formally, if preferences are monotone, space is homogeneous, and transport is costly, then there is no competitive equilibrium involving transportation.

This has far-reaching implications in terms of both positive and normative analysis. From a positive point of view, a natural implication is that, for the market mechanism to work in a spatial economy, we need to move away from perfect competition and/or a featureless space. In this respect, three alternative research strategies have been pursued based on spatial heterogeneities, production and consumption externalities, or imperfect competition. Spatial heterogeneities are at the basis of the Ricardian and Heckscher–Ohlin theories of international trade, which stress technology and factor endowments related differences in relative production costs as the key drivers of the geographical distribution of economic activities. Localized production and consumption externalities are the key forces shaping the economic landscape in urban economics and economic geography. Imperfect competition underpins the industrial organization models of location theory. As discussed in the book, these research strategies have a long history on their own and, by the 1980s, they had already produced the potential building blocks of a comprehensive vision of how the spatial economy works. What was still missing was a way to put them together within a “general equilibrium” framework stressing the endogenous determination of good and factor prices as well as the importance of economy-wide budget constraints. The Dixit–Stiglitz model of monopolistic competition embedded in the general equilibrium models of international trade in the 1980s provided the cement giving birth to what economists started to call “new economic geography” (NEG) and economic geographers prefer to call “geographical economics” (GEC).

Part 1 further discusses the relative merits of the foregoing three modeling strategies. On the one hand, although it is obvious that space is heterogeneous, the differences in technologies and factor endowments seem to fall short of a full explanation of the existence of large metropolises as well as for the persistence of substantial regional income inequalities. On the other hand, the relative relevance of local externalities and imperfect competition seems to depend on the scale of the analysis.

Cities are replete with local externalities and the same holds in local production systems such as industrial districts. Of particular interest are communication externalities that play an important role in services such as management, administration, research, and finance. Knowledge, ideas, and, above all, tacit information can be seen as impure public goods that generate spillover effects from one firm or institution to another.
Accordingly, if people and firms possess different pieces of information and pooling them through informal communication channels can benefit everyone, physical proximity becomes important. That is why, in order to explain geographical clusters of somewhat limited spatial dimension such as cities and industrial districts, it is natural to appeal to local externalities. These, in terms of modeling, have the additional advantage of being compatible with the competitive paradigm.

However, when one turns to a larger geographical scale, direct physical contact seems to provide a weaker explanation of interregional agglomerations such as the Manufacturing Belt in the United States and the Hot Banana in Europe. This is where imperfect competition in the presence of distance related transaction costs comes into play. While both local externalities and imperfect competition are natural components of any complete explanation of the economic landscape, the latter also has a major intellectual advantage in terms of the depth of our understanding. The reason is that externalities often correspond to “black boxes” capturing the crucial role of complex nonmarket institutions through simple reduced forms. Differently, arguments based on imperfect competition allow us to relate the evolution of the economic landscape to changes in the values of some fundamental microeconomic parameters such as the intensity of returns to scale, the strength of firms’ market power, and the level of barriers to goods and factor mobility.

In any case, irrespective of the spatial scale, the “breakdown of the competitive paradigm” has important normative implications. The fact that we cannot explain the economic landscape without assuming some sort of market imperfection (as spatial heterogeneity is not enough) necessarily implies we cannot rely on the free market to deliver an efficient geographical distribution of economic activities.

This fascinating intellectual story smoothly introduces part 2, which is devoted to the presentation of the main NEG/GEC models. While mostly based on monopolistic competition, part 2 also covers oligopolistic models for the refreshment of readers with more pronounced IO backgrounds or interests. In this part, the authors start to exhibit a dedicated attention to the empirical implications of the proposed models that will make the book a precious read not only to theoretically inclined students and scholars but also to empirically oriented ones. A notable example is the chapter devoted to the so called “gravity regression” (chapter 5), which explains bilateral trade flows between countries or regions in terms of their sizes and their reciprocal distance. The gravity regression has long been the dream model of applied trade economists as it has always provided a rather good fit of the data. Until the 1980s, however, it had been a sort of theoretical orphan as it was hard to derive it from the leading theoretical models. Imperfect competition and transport costs now readily do that trick. Those who suspect that, even in the age of globalization, distance is not dead will find here confirmation that it is really hard to kill no matter how sophisticated the econometric approach is.

The truly empirical section of the book is, however, part 3 where how to measure spatial concentration, how to assess its determinants, and how to target the detailed predictions of NEG/GEC models in a structural way is explained. A chapter is also devoted to simulation analyses (chapter 13), on which NEG/GEC relied intensively in the early 1990s to shed light on the functioning of its complex nonlinear models and which, later on, have been used to investigate counterfactual scenarios aimed at clarifying the effects of specific policy changes.

Overall, the book achieves its stated aim “to familiarize the reader with economic theories and their empirical validations, which seek to explain why, even in societies where the circulation of people, goods, and ideas is becoming increasingly easy, economic activities are concentrated in a relatively limited number of areas” (p. xiii). This is obtained by carefully blending theory and empirics thanks to the complementary composition of the authorship. The result is a comprehensive textbook, more palatable to graduate than undergraduate students, and an extremely useful reference for scholars interested in regional and urban economics, international trade, and applied econometrics. Its empirical sections more than its theoretical ones will also appeal to researchers in economic geography proper.

In future editions, the empirical sections of the book should be naturally enriched and refined as
the empirical and theoretical literatures improve their matching. As the authors write when calling for more structural econometrics, “the empirical line of research has underscored the need for hypotheses that are sufficiently simple to be tested, sufficiently general to make sense on an empirical level, but precise enough to allow one to discriminate between economic geography models and alternative explanations” (p. 340). On the other hand, already in the present edition the theoretical sections would have benefited from the inclusion of a chapter on growth models. Regional development and growth are indeed at the core of the rich overview of “Facts and Theories” in part 1 and rank high in policymaking priorities. Hence, it comes somewhat as a surprise that their discussion is confined to the concluding comment on a single paper at the end of chapter 6 (p. 165). Also multinationals should feature more prominently in the book. While their study is acknowledged as a direction of future research (p. 377), existing models of multinational activity already provide enough material to allow for their inclusion. Section 2.6 is titled “Increasing Returns and Transport Costs: The Basic Trade-Off of Economic Geography.” For readers familiar with the international trade literature on multinational firms, that sounds much like the basic trade-off of horizontal foreign direct investment.

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About twenty years ago, I was enrolled in the economics Ph.D. program at the University of Rochester, one of only a handful of departments at that time teaching quantitative general equilibrium models of the macroeconomy. Many economists call these models real business cycle models, or “RBC” models, which has become a catch-all term for aggregate models with an optimizing representative household and which may, or may not, include stochastic productivity and/or other shocks. As a first year Ph.D. student, I remember wishing there was a textbook that provided clear and detailed instructions on how to define and approximate their equilibria.

That book is now here, in George McCandless’s The ABCs of RBC. For every economist who ever felt stymied by the process of numerically approximating equilibria of these models, and for all current and future graduate students who are or who will be aiming to learn this technology, this book is a truly wonderful treatment—a user’s guide—to moving from the set of first-order conditions and budget and resource constraints that characterize the solutions to these models to putting these models on a computer and making them operational. The book provides a stable bridge across the chasm between characterizing equilibria and actually using the models for quantitative analysis, which is required to address positive questions ranging from “how does the model economy respond to a transitory shift in technology?” to normative questions like “what are the welfare consequences of reducing capital income tax rates?”

The book is intended as an introduction to modern quantitative macroeconomic modeling, narrowly focused, to provide a foundation for readers to learn first-order approximation techniques. The raison d’être for the book is the fact that dynamic macroeconomic models rarely offer closed-form solutions. In macroeconomic applications, specifications that do admit closed forms tend to be restricted to the cases of quadratic objective functions and linear constraints, so that the policy functions are in turn exactly linear (see Lars Hansen and Thomas J. Sargent 2004) or isoelastic (power) utility functions and Cobb–Douglas production, with complete depreciation of capital, so that the policy functions are exactly log-linear. In this latter class of models, the standard linear depreciation schedule of capital severely limits solutions that can be achieved with pencil and paper.

For many years, the impediments of learning how to define and approximate equilibria, along with writing the necessary computer code to do so, were significant entry barriers to pursuing macroeconomic research and these tools were largely limited in use to economists who were trained at Minnesota, Chicago, Rochester, or
Carnegie Mellon. This book fills that gap. It is intentionally narrow in focus so that readers can gain expertise using first-order approximations techniques in basic deterministic and stochastic optimal growth models and in models with a number of extensions, including monetary economies with flexible prices, and also with staggered price and wage setting, models with financial intermediation through working capital, small open economy models, and overlapping generation models.

This is a textbook in the truest sense—every word, diagram, and table have been assembled to make learning this technology as transparent as possible. For the most part, the exposition is truly outstanding. As you read the text, you feel as if they were detailed notes written by someone in the process of learning and distilling a lot of information about a difficult and nuanced topic. And this is exactly how it was done, as noted by McCandless in the text.

All of the chapters are well done. While there is some overlap with other treatments in the literature, there are aspects of the book that are done better here than elsewhere, including figures in chapter 4 that show why linear methods work so well in approximating solutions to certain classes of economies. The book excels exactly where many texts do not by being remarkably transparent and explicit. If you occasionally feel that advanced economics textbooks are a bit like those impossible “how-to-assemble furniture instructions” we have all sweated over, this book is for you. My favorite chapter is 6, which provides an excellent and comprehensive discussion of how to approximate Gary Hansen’s (1985) business cycle model of the U.S. economy. The chapter presents an excellent treatment of describing how to linearly approximate the solution, including the alternative approaches of quadratic dynamic programming and log-linearization of the first order conditions, and also includes detailed discussions of the methods of Blanchard and Kahn, and Schur decompositions.

Chapter 12 includes a model in which prices are perfectly flexible, but a monetary injection raises output via a liquidity effect, in which an expansionary central bank open market operation necessarily lowers nominal interest rates because households cannot instantaneously adjust their portfolios. This model has largely been supplanted by models with imperfectly flexible wages and prices as a mechanism to achieve nonneutral monetary policy but, in my view, the model of chapter 12 should be revisited within the literature, particularly since it more directly captures the monetary transmission mechanism we typically ascribe to central banks.

In the process of making the details of this process so readily accessible, one might have a few quibbles about some cases in which some rigor is sacrificed or some modeling features that are fairly common aspects of the process are not discussed. For example, the standard discussion of iterating on Bellman’s equation is usually motivated by contraction, but not here. The chapter on solving deterministic paths does not include what has become a standard solution approach, which is setting the problem up as a two point boundary problem, making use of steady state results, and solving a system of nonlinear equations. Matlab, which is the code used in the text, Gauss, and other optimization software can solve these types of nonlinear systems accurately and quickly. The process of rendering the model stationary for either deterministic (or stochastic) trends in technology or population is not considered, and would be useful to include.

The book would benefit from some additional economics and their interplay with the type of approximations considered. For example, first order approximations impose what is known as certainty-equivalence on the problem, which largely renders first order approximations uninteresting for issues related to risk. There is no discussion of the preferences that admit steady state growth paths, and the book would benefit from a few pages on describing different equilibrium concepts—date zero markets, sequence of markets, and recursive equilibria. In fact, one of the most challenging issues for students I have found in teaching dynamic economics is how to define a recursive equilibrium, and how to define the set of state variables for that equilibrium. And fiscal policy, including government spending and distorting taxation, is omitted but could easily have been included given that the general equilibrium concept for distorted economies is already in place, and this certainly will make the book more topical, given the recent focus on fiscal policy.
within the current world economic crisis. All of these additions could be included in what surely should be a second edition.

Readers will note that the book does not address the issues involved with how to choose parameter values for a particular model. There currently is a very active research program using econometric techniques, both Bayesian and Classical methods, to choose values (e.g., Jesus Fernandez-Villaverde and Juan Rubio-Ramirez 2009), which is in some cases an alternative to calibration as developed and used by Kydland and Prescott. While these issues are generating considerable discussion and interest among macroeconomists, they are very distinct from the aim of this book and in my view McCandless was right to not deal with this.

There are one or two minor areas that may puzzle readers. One of these relates to achieving optimality in a cash-in-advance economy by implementing the Friedman rule in which deflation at the rate of time preferences reproduces the optimal allocations in a model without money. But the quantitative results show slight steady state differences between the moneyless economy and the monetary economy with optimal policy, which likely reflects some small approximation errors in the solutions to the two economies. Another is defining all the terminal conditions involved for monetary economies, one of which is the standard condition for capital, and another of which is a terminal condition for the value of money balances.

This text provides an excellent and systematic treatment for linearly approximating solutions to dynamic macroeconomic models. In addition, there is a website that includes programs as well as drafts of additional chapters that will also be of interest to readers: http://www.cema.edu.ar/~gtm/The_ABCs_of_RBCs/.

This book would be a terrific fit in a first year graduate course in macroeconomics, supplemented by Lars Ljungqvist and Sargent (2004) and/or Nancy L. Stokey and Robert E. Lucas (1989), or used in a second year course that focuses on quantitative analysis of macroeconomic models.

REFERENCES

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D Microeconomics


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How do politicians determine public policies? Do they respond more to electoral constraints or to the lobbying and rent-seeking activities of interest groups? For true believers in policy decisions being taken through strategic policy contests, Gil S. Epstein and Shmuel Nitzan wrote a clear, comprehensive, detailed, almost *divine* book. More agnostic readers will find the book equally likeable and interesting. Most likely, however, they will not be convinced by the authors that two-stage policy contests populated by bureaucrats, (two) interest groups, and a “randomizing” politician constitute a general—that is, independent of the specific political structure—reasonable way of representing the process of policy decision making.

The authors are very effective in providing a clear and accessible introduction to the basic policy contest and to its main character—the contest success function. After chapter 2, the reader is, in fact, advised that the outcome of a contest between two groups, as decided by the politician, is indeed random. It depends on a contest success function—for example, a lottery or an action function—that takes into account the activities (such as contributions or effort) undertaken by the two interest groups. Chapter 3 is instead entirely dedicated to convince the agnostic reader of the usefulness of this way of modeling the process of policy decision making. The main argument is simple and convincing. Politicians
may prefer the randomness of the contest success function, which will likely induce contributions in their favor by the interest groups, to a certain, but ex ante (that is, not affected by the interest groups’ actions) policy decision. However, this rationale is only partial. For instance, what if politicians could determine the policy with certainty after the interest groups have exerted their lobbying effort—as in a typical lobbying model? Unfortunately, this comparison is not discussed.

The work-horse model of this book is the two-stage policy contest developed in Epstein and Nitzan (2002). The presentation of the basic contest game (in chapter 4) correctly emphasizes the sequence of the game as one of its characteristic features. In the first stage, politicians—or alternatively bureaucrats working for the politicians (and/or sharing their preferences)—select a policy, which will be compared to the status quo. In the second stage, two interest groups—each one supporting a policy—choose how much effort to exert, or how many resources to devote, in order to promote their most preferred policy. The final decision on the policy to be implemented is then left to the politician or—better said—to a contest success function. Which real-world situations may this contest describe? The authors provide several applications throughout the book and, in particular, in the last five chapters. For instance, this policy contest may emerge in the case of decisions on public good provision, such as the creation of a public park, in which two interest groups may support opposite policies—the status quo (no park) and the new policy (building the park). A detailed discussion of all the properties of different families of these two-stage policy contests is provided at chapters 5 to 9. Some interesting results emerge. For instance, while in most political economy models an increase in politicization is harmful for social welfare, this may not occur in a two-stage policy contest. Here, an increase in the weight given by the politicians to the contribution received by interest groups (and a corresponding reduction in the social welfare weight) may induce the first-stage movers (the bureaucrats or politicians) to modify the proposed policy in the direction of increasing social welfare. Analogously, while in the typical lobbying models summarized in Gene M. Grossman and Elhanan Helpman (2001) the equilibrium policy is moderate since it represents a combination of the most preferred policies by the two interest groups, this result may not hold here. A more extreme policy may in fact emerge in this two-stage environment since, in the first stage, bureaucrats (or politicians) may find it convenient to propose an extreme policy in order to extract more contributions. Another interesting property of these games (discussed at chapter 8) shows that interest groups’ behavior is affected by the relative payoffs of the two policies, namely the distribution of the prices associated with the two policies—the one chosen by the bureaucrats and the status quo, more than by their absolute size. Finally, chapter 9 proves that, when side payments (or transfers) are available, a Coase like theorem holds.

The fourth part of the book, consisting of chapters 10 and 11, discusses a different two-stage policy contest. In the first stage, the interest groups replace the bureaucrats (or the politicians) in selecting the two policies that enter the contest. As in the previous version of the contest game, in the second stage, interest groups continue to provide some action to influence the politicians’ decision, which is again taken according to a contest success function. How relevant is this new game with respect to the contests analyzed in the previous chapters? The authors use the example of the monopoly–consumer contest, which is indeed recurrent in the book, to underlying its real-world underpinning. Interestingly, they show that the “defender” interest group (i.e., the consumers) will set a price, which is indeed higher than the status quo perfect-competition price; while the “challenger” interest group (i.e., the monopolist) will strategically restrain the price below the (static) monopolist price. This moderation result stems from the incentives that the interest groups have not to battle too hard in the second stage. Full convergence is however not achieved.

The last part of the book (chapters 12 to 16) presents five applications of the two-stage policy contests respectively to monopoly-price discrimination, privatization, migration policy, minimum wage, and tournaments. These examples lead to some surprising results. In a monopoly-price discrimination situation, regulators interested in contributions may set an even higher price than the one charged by the monopolist. In the case
of privatization, with politicians setting the price of the state-owned-enterprises, privatizations are more likely to occur if politicians care more about the transfers (from the interest groups). But perhaps the most appealing application is to tournaments. Here, the principal (a manager) sets a tournament to exert a promotion effort from two agents (the workers). This promotion effort represents a private rent for the manager that does not accrue to the firm’s benefit. While its application to the private sector may be questionable—what is the cost for the manager to promote bad workers?—this situation may indeed describe quite accurately the process of promotions in the public section whenever the managers pay little or no penalty to select bad workers.

For the true believers in strategic policy contests, the book, thus, provides a full range of theory and applications. Yet, is this enough to convince the agnostic reader of the empirical relevance of this modeling tool? Despite the precious effort, some concerns about these strategic policy contests indeed remain. Modeling the politician’s choice with a contest success function lacks micro-foundations. Even within a two-stage strategic contest, wouldn’t the politician be better off by directly determining the public policy rather than relying on this contest success function? The authors acknowledge (in chapter 3) that other models of policy decision are instead micro-founded; but they criticize the underlying assumptions on individuals’ preferences, political institutions, and policy space. In their view, a more general, albeit reduced form model, such as these strategic policy contests, has more potential to explain public policy decision making. Yet, the recent political economy literature seems to have taken a different root (see Torsten Persson and Guido Tabellini 2000 and Daron Acemoglu and James A. Robinson 2006). Several scholars have also analyzed the framework conditions of the policy-making process, such as political institutions, historical and legal background, and even cultural traits. In their book, Epstein and Nitzan often refer to political culture, and derive some interesting results that rely on this crucial concept. Unfortunately, however, political culture represents only a parameter in their politicians’ objective function, and it is unclear how much we can learn from it.

A final note on the style. The diligent reader who begins at page 1 and finishes at page 202 will have to go through some repetitions of formulas (typically, first order conditions) and examples, which may make his task less pleasant. This is, however, a small price to pay to favor end users of strategic policy contests, who will find this book an excellent compendium where to look for clues, inspiration and solutions on two-stage policy contests.

References

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Truth or Economics: On the Definition, Prediction, and Relevance of Economic Efficiency.

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In this book, Professor Markovits, a law professor at the University of Texas, Austin, criticizes what he regards as the flawed analysis of economic efficiency used by economists. While the effort has promise, Truth or Economics unfortunately reveals Professor Markovits’s misunderstanding of welfare economics and his difficult and often incoherent writing.

Professor Markovits starts his welfare analysis by defining “equivalent-dollar gain” (or “loss”), which according to him is the same thing economists call equivalent variation (p. 3). However, he then defines “equivalent dollar gain” as follows (p. 22):

I argue that a winner’s equivalent-dollar gain should be defined to equal the number of dollars that would have to be transferred to him to leave him as well off as the choice would leave him if
1. he did not agree to the transfer;
2. he either was intrinsically indifferent to the substitution of the transfer for the policy in question or was unaware of the linkage between the transfer and the policy’s rejection;
3. his distributive attitude toward such transfers, non-parochial distributive preferences, or normative distributive commitments gave him no reason to prefer the transfer to the choice or vice versa; and
4. the transfer would not benefit or harm him indirectly by changing the conduct of others by altering their incomes and/or wealth.

This definition is obscure, yet it underlies Professor Markovits’s entire approach to evaluating efficiency and welfare.

Having defined “equivalent dollar gain,” Professor Markovits claims that “the impact of a choice on economic efficiency equals the difference between the equivalent-dollar gains the choice confers on its beneficiaries (the winners) and equivalent-dollar losses it imposes on its victims (the losers)” (pp. 21–22). Furthermore, in considering “the impact of a choice on economic efficiency all of a choice’s equivalent-dollar effects count equally in the economic-efficiency calculation” (p. 31). Unfortunately, his attempt to explain this only causes more confusion. “In this conception, for purposes of measuring the economic efficiency of a choice, equivalent-dollar effects that derive either from an individual’s external preferences for others’ welfare (such as for the welfare of family members, friends, or members of particular racial, ethnic, or religious groups or for the instantiation of some non-parochial distributive norm) or from bad tastes (such as sadistic tastes or prejudices) count the same as equivalent-dollar effects that derive from any other kind of preference (such as for breathing less-polluted air oneself)” (pp. 31–32).

Professor Markovits consistently fails to convey his message clearly, leaving the reader no option but to try to infer what he is attempting to say. Efficiency, of course, is a question of maximizing outputs from a given quantity of scarce inputs. I believe that in many, perhaps most, cases when Professor Markovits says “efficiency” he means what economists call “welfare.” Professor Markovits wants to measure how a given change in economic circumstances affects the welfare of a “winner” and a “loser” by comparing their equivalent variations given his unusual definition of equivalent variation. He devotes an extensive discussion to why equivalent variation can differ from compensating variation, and for reasons that are not understandable to this reviewer, he thinks the former (again, with his unusual definition) is the key to understanding efficiency and welfare, whereas the latter is pernicious.

Professor Markovits next turns to a discussion of how second-best effects can affect welfare analyses. He defines “first-best-allocative-efficiency analysis” as “the approach to economic-efficiency analysis (used by the overwhelming majority of economists and law and economics scholars) that proceeds on the assumption that any choice or policy that decreases the number or magnitude of Pareto imperfections will tend on that account to improve resource allocation” (p. 75). This is the approach he condemns, based on his concerns regarding second-best issues.

Professor Markovits defines “second-best-allocative-efficiency analysis” as “the approach to economic-efficiency analysis that would be perfectly accurate and economically efficient if perfect theoretical analyses could be costlessly executed and perfect data could be costlessly collected” (p. 76). Given that the “second-best-allocative-efficiency analysis” is not feasible, his preferred approach is the “third-best-allocative-efficiency analysis,” which he defines as “the approach to economic-efficiency assessment that is allocatively efficient, given the fact that in our actual, worse-than-second-best world Pareto imperfections are pervasive, choices or policies affect the magnitudes of large numbers of types of resource misallocation, and data and analyses are costly and inaccurate” (p. 76).

One might wonder how Professor Markovits would implement his “third-best-allocative-efficiency” (“TBLE”) analysis. (Professor Markovits informs us that TBLE is the appropriate acronym for “third-best-allocative-efficiency” because it resembles the word “table,” never mind that it is not actually the correct acronym.) Professor Markovits describes his TBLE methodology for
evaluating the welfare effects of a given private choice or public policy as follows:

1. Identify the various types and subtypes of resource uses in the economy.
2. Develop formulas that relate the aggregate percentage distortion in profits yielded by the marginal resource use of each such type and subtype to various Pareto imperfections in the economy.
3. Collect existing information on, and guesstimates of, the prechoice or pre-policy magnitude of the parameters from step 2 showing those marginal resource uses whose profit yields seem likely to be inflated.
4. Take a random sample of marginal resources uses and estimate the aggregate percentage distortion in their profit yields.
5. Estimate the distribution of the non-negative aggregate percentage profit distortions.
6. Analyze the way in which the private choice or public policy would affect (or did affect) the economy's various Pareto imperfections.
7. Estimate the allocative efficiency of the private choice or public policy by comparing the prechoice or prepolicy profit-distortion distribution with the postchoice or postpolicy profit-distortion distribution.

Professor Markovits notes, with no apparent sense of irony or humor, that a given TBLE analysis must pass its own TBLE test, resulting in an infinite regress where we conduct TBLE analyses on TBLE analyses on TBLE analyses, and so on forever (pp. 155–56).

Based on his TBLE analysis, Professor Markovits reaches a number of conclusions, including the following:

“I believe that too few resources are allocated to the production of goods other than leisure relative to the amount allocated to the production of leisure” (p. 170).

“Too few resources are allocated to unit-output-producing uses as opposed to [quality or variety] investment creation and use” (p. 170).

“Too few resources are allocated to the production of existing products through existing production processes as opposed to [production-process-resource] execution and use” (p. 170).

“Too few resources are devoted to the production of existing products with existing technologies as opposed to the combination of [quality or variety] investment creation and use and [production-process-resource] execution and use—that is, almost certainly, economic efficiency would be increased if, without generating any allocative transaction costs, one reallocated some percentage of the resources currently devoted to [quality or variety] investment creation and use and the same percentage of the resources currently devoted to [production-process-resource] execution and use from a random sample of the marginal uses of each of these types to a random sample of unit-output-producing uses that are currently just extra-marginal” (p. 170).

I could go on quoting Professor Markovits, but I am unable to provide any more insight into what he's trying to say. Unfortunately, any valuable substance that _Truth or Economics_ may contain is lost in a blizzard of incomprehensible jargon.

Michael A. Williams

_Competition Economics_


Can economic theory inform how the brain carries out computations necessary to make economic choices? And can an understanding of the biological basis of such behavior help improve and refine economic models? These are some of the larger questions surrounding the nascent but rapidly growing field of neuroeconomics. For some, however, the goal of neuroeconomics is a practical one. For example, does the introduction
of economic models of decision making help clarify issues concerning diagnosis and treatment of neurological and mental illnesses? The latter set of questions, through the case study of disordered gambling, are the focus of Midbrain Mutiny. At the same time, however, the evidence reviewed along the way helps to clarify and answer the larger question of why should economists care about neuroscience, and vice versa.

Midbrain Mutiny continues the thesis set forth in Economic Theory and Cognitive Science (Don Ross 2005). In the latter book, Ross (one of the four authors here) argues against the standard depiction in economic theory of a unitary decisionmaker with stable, transitive preferences. In contrast, Ross offers the view that an individual’s choices can be best interpreted as a game between subagents within the individual, an approach referred to as “picoeconomics,” first put forth by George Ainslie (1992). The current book focuses on the specific case of disordered gambling, gathering an impressive collection of data from behavioral psychology, experimental economics, neuroeconomics, and pharmacology. Chapter 2 describes the scientific disagreements surrounding gambling addiction and traces much of the confusion over the diagnosis of “pathological gambling,” defined through the Diagnostic and Statistical Manual of Mental Disorders – IV (DSM-IV, 2000). For economists, this chapter also illustrates the contributions that experimental economics can make to neuroscientific studies of addictive behavior and psychopathologies by measuring behavior in a precise and quantitative manner. The DSM-IV diagnostic for pathologic gambling criterion, for example, includes some the following: (1) you have often gambled longer than you had planned, (2) you have made repeated, unsuccessful attempts to stop gambling, and (3) you have felt depressed or suicidal because of your gambling losses (p. 33). Agreeing with five or more of the ten statements would qualify one as a pathological gambler. Not surprisingly, this qualitative diagnostic tool has generated much controversy in both over- and underdiagnosis of pathological gambling.

Chapters 3 and 4 present the experimental evidence from behavioral studies of impulsivity and temporal discounting, identifying these as crucial features of addictive behavior. Informed readers of the hyperbolic discounting literature will not be surprised to find that this literature had its origins in studies of animal behavior in the 1960s, due in large part to the efforts of the late Richard Hernstein. These studies laid the foundation for the modern effort to model and quantify addictive behavior. This chapter also discusses the rational addictions model, including behavior that are difficult for such a model to account for, such as external commitment and personal rules, which are often imposed at great cost to the individual. Much of this was previously discussed in Ross (2005) and is only mentioned briefly here.

Chapter 5 somewhat abruptly introduces the literature on the neuroeconomics of addiction. It draws from the flurry of studies in the past ten years or so on the midbrain dopaminergic regions, the so-called “reward system.” This is the network of regions that is enervated by dopamine, a neurotransmitter that is now thought to be intimately tied to reward. Many of these studies either involve or draw upon the research of economists working in tandem with neuroscientists. This then becomes the thesis and title of the book, presented in chapter 6—that disregulation of these basic structures related to reward is at the core of disordered gambling. Some of the most powerful evidence for this view are studies documenting the development of addictive gambling behavior as caused by certain pharmaceutical agents (p. 190). This evidence is presented in chapter 7 and it is, in many ways, the strongest chapter of the book. It offers a clear glimpse of why neuroeconomics is valuable to theorists and practitioners alike—economic models provide precise, quantitative behavioral measures that can improve the sensitivity and validity of clinical trials, which in turn provide powerful tests of causality.

This chapter, however, also highlights an unfortunate aspect of the book—the tendency to mention many studies briefly, while not describing any in detail. This leads to a relative paucity of details on the methodology and background of the many studies cited. For example, table 7.1 (pp. 182–85) presents no less than twenty-four separate pharmacotherapy studies, across five different drug classes. Many of the studies are so new that it is difficult to separate the signal from the noise. There are also practical and ethical constraints faced in conducting such studies, which often
result in small and heterogeneous samples. Readers not intimately familiar to the neuroscience and pharmacology literature (that is, most economists) will have difficulty understanding the weight they should attach to these findings.

The eighth and final chapter is in large part an attempt to bridge the picoeconomics view of an individual’s decisions as the byproduct of the game between multiple subagents, each with their own particular goals and desires, and the algorithmic and mechanistic decision-making approach of neuroeconomics. One possibility is, as the neuroscientist Greg Berns succinctly put it, “The interaction of different pools of neurons in the brain may result in phenotypic behavior that appears to be irrational, but it is possible that the rational agents are the neurons, not the person” (p. 125). Unfortunately, such pools of neurons have proved elusive. Perhaps even more troublesome, it is unclear what constitutes as proof of the existence of such neurons. To take the example of a highly influential study, Samuel M. McClure et al. (2004) observed distinct brain regions that responded choice sets that included only delayed rewards versus those that also included immediate rewards. This, along with other results, were interpreted as evidence for existence of separate impulsive “β-system” and a patient “δ-system.” Such an interpretation has been challenged on both empirical and conceptual grounds (pp. 237–39). Ross et al., however, offer no suggestion on what would qualify as persuasive evidence for the existence of such subsystems, and sidestep the issue as an empirical one, “Evidence that they do not have direct molecular counterparts as McClure et al. suggest is not evidence that they don’t exist (italics original)” (p. 238). This is disappointing as the authors, given the emphasis in the philosophy of science and their positioning of picoeconomics as a serious alternative model, are well-positioned to make such an argument.

In sum, Midbrain Mutiny is a welcome addition to the growing literature in neuroeconomics. It will likely prove to be difficult to follow at various points for all but the most well-informed readers. Someone who is expecting a gentle introduction to the terminology and stylized facts of neuroeconomics will likely be overwhelmed by the immediate references to, among others, brain regions, neurotransmitters, and pharmacological agents. Those willing to invest the effort, however, will find a thoughtful and provocative book that will appeal to those who are interested in seeing the real world implications of a biological understanding of economic behavior, as well as how economic theory contributes to such an understanding.

References


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In the first chapter of *Nudge*, Thaler and Sunstein lay out two types of people: *homo economicus* and *homo sapiens*. Homo economicus, or “Econ” for short, is “economic man” who “chooses unfailing well, and thus fits within the textbook picture of human beings offered by economists” (page 6). Homo sapiens, or “Humans” for short, are real people who make systematic mistakes, experience temptation, have limited energy, attention, knowledge, will-power, and computational capacity. *Nudge* leads us through a summary of current research in economics, cleverly organized to highlight the differences between Econs and Humans as they make decisions in key markets central to current economics and public policy debates.

The typical Human who reads this book will find it interesting and enjoyable to read—a book that systematically describes and defines behaviors and summarizes current research showing
just how important it can be to take these behaviors into account when designing public policy. However, the typical Human may not find it surprising that people procrastinate, are strongly influenced by social norms and advertising, or use heuristics and rules of thumb to simplify decisions; they are probably aware that they do these things themselves. Although Econs are defined as following textbook, forward-looking, fully informed and utility-maximizing decisions, introspection will lead them to conclude that they also engage in many of the human behaviors highlighted in *Nudge*. A casual survey of my colleagues at Yale reveals that we persistently overestimate how much we can get done and commit to give papers at seminars before they are ready to “make” ourselves finish them. We also don’t order cable to prevent ourselves from watching “too much” TV, and one year we even stopped ordering cookies for the weekly Industrial Organization lunch so that we wouldn’t “over-eat”!

Despite the fact that, upon introspection, most Econs will find that they have more in common with Humans than their models reflect, the assumptions that define Econs are tractable, widely used and agreed upon methods of describing economic decision making. If Human deviations from Econ behavior are on average small, or only exist in small segments of the population or in negligible economic situations (such as the first time making a decision or when gambling on vacation at a casino), then classic models of economic behavior present tractable and on-average-accurate ways to describe economic activity, conduct policy counterfactuals, and calculate welfare. They can inform economic policy even if Econ behavior does not hold perfectly for all agents in every situation.

In *Nudge*, Thaler and Sunstein make two nice contributions on this front. First, *Nudge* summarizes the growing body of research (to which the authors themselves have contributed) demonstrating that key behaviors excluded from traditional economic models have first-order importance for decisions and outcomes in first-order economic policy arenas such as savings and retirement, health, and education. Second, *Nudge* puts forward the idea that, despite the fact that Human behavior falls short of the Econ ideal in important ways, these behaviors can be incorporated into policy design in a way that can improve the efficiency of decision making for Humans, while “doing no-harm” to Econs.2 *Nudge* accomplishes this in a well-written, organized, entertaining and cleverly constructed manner that holds economists’ interest and communicates ideas clearly for policymakers, students, and anyone interested in economics and public policy.

The authors start the book by skillfully presenting a contrast between marketing and product design in the private sector versus the public sector. They walk the reader through a hypothetical conversation between Adam, a “statistically oriented” management consultant and Carolyn, the “director of food services for a large city school system.” With Adam’s experience analyzing grocery data and running experiments to examine the effects of product placement on purchase behavior, he points out how the placement of food in the cafeteria can significantly impact which foods children eat. Product placement in the context of public policy design could be used to, for example, facilitate healthier lunches and a more balanced diet among children eating at cafeterias in Carolyn’s school district. This juxtaposition highlights that, while the field of Marketing teaches business leaders to design products through package design, product placement, contracts, and price schedules that incorporate Human behavior to maximize profits, relatively little of Marketing science is reflected in public policy.

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1 For example, when the *Wall Street Journal* published a summary of Dora Gicheva, Justine S. Hastings, and Sofia Villas-Boas (2007) showing that consumer price elasticity at grocery stores is surprisingly sensitive to spikes in retail gasoline prices, online comments suggested that the finding seemed unsurprising (to Humans) since substituting toward cheaper grocery products is something most people do to “save money” when gas prices rise.

2 For example, Hastings and Lydia Tejeda-Ashton (2008) study how workers choose funds in Mexico’s privatized social security market. They find that financially illiterate investors become much more sensitive to fund manager fees when those fees are shown in pesos per year cost instead of in annual percentage rates, while the price-sensitivity of financially literate investors remains unchanged. Thus showing fees in pesos helps the decision process for those with limited financial backgrounds, while doing no harm to the educated and financially sophisticated minority. This implies an overall improvement in the functioning of the market.
policy design. Hence, supermarkets place “temptation” items in the check-out line, a placement that should not affect the consumption behavior of an Econ but may have a substantial impact on Humans, while their publically run counterparts (cafeterias) may not even consider how product offerings and placement impact choices.

This is a particularly clever way to start the book because it draws the following analogy for the reader: just as the firm can be seen as an agent whose objective is to design products to minimize competition, exploit behavioral biases (Glenn Ellison 2006; Stefano DellaVigna 2009), and who may have no incentive even in a competitive equilibrium to correct consumers’ behavioral biases (Xavier Gabaix and David Laibson 2006), we can view the policymaker as the reverse—an agent whose objective is to design markets and policies to maximize competition and mitigate the distortions that Human behavior can have on market outcomes. Thaler and Sunstein refer to this as “choice architecture” and proceed to describe and define behaviors that distinguish Humans from Econs, and then discuss examples of where and how public policy can use choice architecture to mitigate the negative impact Human behaviors can have, clearly summarizing the relevant empirical research as they go.

The first set of chapters outline key Human behaviors that deviate from the ideal Econ decision-making process. Among these are reference dependence and loss aversion, rules of thumb and mental accounting, status quo bias, temptation and self-control, and social or peer influence and pressure. In describing each of these factors that shape Human decision making, Thaler and Sunstein often reference physiological and psychological roots of the behavior, drawing parallels between systematic mistakes people make in simple psychological tests with systematic errors people make in real-world decisions. They also integrate examples of products produced in private markets or marketing design that serve Humans with persistent problems. For example, alarm clocks that are designed to prevent people from hitting the snooze button more often than they would like.

This leads to a discussion of how each of these behaviors can have large impacts on decision making in some of the most important arenas for economics and public policy. Over the next few chapters, the authors use real-world examples and references to current research to establish that the previously outlined behaviors aren’t negligible individually or in population averages, may not be easily addressed or overcome by free markets (e.g., alarm clock snooze design), but may be successfully overcome by simply making basic changes to policy design or choice architecture. They also outline decision-characteristics that Humans find challenging—markets where choice architecture may be particularly beneficial. These include decisions that involve delayed gratification with immediate cost and decisions that are made infrequently enough that expected costs and benefits are difficult to compute, for example infrequent decisions, decisions involving delayed feedback, and decisions over areas where preferences and outcomes are unknown or difficult to project. Introspection leads us to conclude that most of the economic policy-relevant decisions fall in this category: education, savings, insurance, health care, and health investment.

Several chapters are subsequently devoted to describing how clever policy design and “choice architecture” can help Humans overcome many of the difficulties and biases in these decisions while allowing Econs the freedom to optimize with minimal constraints. The chapters cover savings, investing and credit decisions, health care and Medicare reform, environmental consciousness and pollution externalities, and public education reform. By the end of these chapters, the reader has an idea of how Human behavior diverges from Econ behavior, how important these deviations are for understanding when public and private markets do or do not provide efficient outcomes, and how simple changes in choice architecture can lead to first-order improvements in decisions with minimal administrative costs.

The timing of this book is very opportune. Economists and policymakers are currently grappling with huge issues such as health care reform, social security reform, and environmental policy reform. They are doing so in the context of a financial crisis that is difficult to reconcile with Econ behavior and generated in part by the creation and trading of financial instruments whose actual risk and value are complex to the point of being prohibitively difficult to understand. Nudge
is a timely book for students, policymakers, and economists alike to read. It provides an excellent narrative of decision-making behaviors and summary of current empirical research that policymakers can reference as they consider alternative policy design and students can reference as they think about directions for their own research. It is also a springboard for economists who are interested in developing alternative models of decision making and understanding their implications for public policy design.

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**International Economics**


*Reinventing Foreign Aid* is a collection of essays by researchers at universities, multilateral organizations, and think tanks mostly based in the United States. There is a lot to digest—a total of nineteen papers plus an introduction by the editor, Bill Easterly. Most contributors, including the editor, are distressed by the performance of the foreign aid establishment and address reform possibilities. The essays can broadly be divided into three categories: (1) critique of the procedures and practices of the major multilateral and bilateral organizations, often by current or former employees; (2) analysis of the problem of evaluation: how to do it, and why it happens so rarely; and (3) discussion of new initiatives like the Millennium Challenge Account of the U.S. government.

This collection should quickly find its way on to the bookshelves of academics and development practitioners: some of the best research in the field in presented in an accessible way (usually). For instance, Esther Duflo and Michael Kremer provide a lucid discussion of econometric methodology, making the case for their preferred approach (randomized interventions), but also discussing competing approaches. This essay is made-to-order for (for instance) undergraduate instructors of students with limited background in econometrics. Abhijit Banerjee and Ruimin He argue that randomization methods can be widely applied (more generally, that evaluation is possible) and provide numerous examples. Michael Kremer and Edward Miguel provide one application to a health intervention in Kenya, which yields a clear and convincing policy implication, regarding the need for full and sustained subsidy of a treatment that generates large externalities. Taken together, these three essays make a strong case for an increasingly influential approach in development research.

Present and former employees of the World Bank and other multilateral organizations provide a number of interesting insights, drawing on their own experience as well as research. One complaint, echoed by several contributors, is that there are often too many donors who do not coordinate and impose heavy paper-work burdens on already thin bureaucracies. These papers also raise the possibility that aid organizations, which pay more than developing-country governments, weaken them by stealing their best employees. Easily available aid also distorts incentives for governments to satisfy domestic constituencies. Stephen Knack and Aminur Rahman are able to statistically demonstrate the adverse impact of donor fragmentation on the quality of the bureaucracy and on the composition of public spending.
In the concluding chapter of the book, Nancy Birdsall summarizes many of these arguments and, constructively, suggests “fixes” for each of the problems identified. This excellent essay can be read as a manifesto or reform agenda, around which much useful discussion could be organized.

Several pieces take on the intellectual and organizational culture of the official aid organizations. Kurt Hoffman argues they should learn from the for-profit sector and acquire “business DNA” (p. 494). Dennis Whittle and Mari Kuraishi say that foreign aid is organized along the lines of central planning, which is known to have failed. This is consistent with Easterly’s introductory piece in which he makes the case for a bottom-up, decentralized, experimental model of intervention, populated by “searchers.” He draws a contrast with what he sees as the dominant model today—top-down, rigid, and unaccountable, populated by “planners.” The argument will be familiar to readers of previous work by Easterly (2006).

Given the book’s emphasis on experimentation, learning, and diversity of approach, this reviewer was disappointed by its own homogeneity of location. The majority of contributors (and this reviewer, for that matter) is based on the east coast of the United States. If foreign aid is to be more effective, surely we need the insights of recipients of this aid. For instance, several authors cite the case of Tanzania as an example of donor fragmentation. A Tanzanian official (say) could likely provide a useful discussion. Similarly, on the issue of evaluation it would be useful to hear from an NGO about the reasons for its skepticism—to what extent is it driven by doubts about methodology, competence, or motives of evaluators?

In attacking foreign aid effectiveness (in his introductory essay) in a style he describes as “frankly polemical,” Easterly is perhaps overly polemical. Alleviating poverty has always been difficult, even in rich countries like the United States, where pockets of poverty persist and debate between “searchers” and “planners” continues. Indeed Easterly’s appeal for “searchers” is reminiscent of President George H. W. Bush’s call for a “thousand points of light.” It even appears that authoritarian and heavy-handed regimes have sometimes succeeded in improving health and education outcomes (e.g., the socialist countries). The roles of searcher/planner, state/market, top-down/bottom-up seem more complex than Easterly allows.

One also wonders to what extent the failures of foreign aid have been due to the strategic objectives of donors, especially during to the Cold War. For instance, if General Mobutu of (then) Zaire misused aid money, this was likely expected and tolerated by donors for geo-political reasons—it would be unfair to blame the “planner” mentality of aid bureaucrats. Security considerations have again come to the fore after September 11, 2001. How this is affecting allocation and use of aid? Are strategic and humanitarian considerations complementary or in conflict? Easterly has a sophisticated discussion of this issue elsewhere (2008), so its neglect in this volume is somewhat puzzling.

**References**


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**G Financial Economics**


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Technical analysis is not held in high regard among financial economists. Burton G. Malkiel, for example, ridicules technical analysts throughout his best-selling investment book, *A Random Walk Down Wall Street*. His thesis is that past movements in stock prices cannot be used reliably to foretell future movements and that “the technicians do not help produce yachts for the customers, but they do help generate the trading that provides yachts for the brokers” (Malkiel 2007, p. 145). Against this background, the suggestion by the authors of this book, Andrew W. Lo and Jasmina Hasanhodzic, is surprising. They
propose that the gap between financial economists and technical analysts may mostly be linguistic. The authors hope that their book will help to bridge this gap, thereby “[catalyzing] the interactions between academics and technicians to the benefit of both communities” (p. xvii).

One of the authors, Lo from the MIT, has extensively studied the random-walk theory and the usefulness of technical analysis in predicting asset prices. He often walks away from these investigations with the conclusion that technical analysis may add some value to the investment process. Most financial economists, however, remain unconvinced on both empirical and theoretical grounds. The common argument reads something like this: first, a price pattern is often not strong enough to cover the transaction costs that you would incur by trading on it and, second, even if the price pattern has existed in the past, it is surely to disappear in future, in particular if many investors begin to trade on it. However, to be fair, most financial economists today hold views that are very different from those held in the 1960s and 1970s. For example, even Malkiel had to moderate his technical-analysis arguments in the 1990s to address the emerging body of research that found significant support for technicians’ key claim that asset prices exhibit momentum.

The goal of the book is admirable and some of the interviews suggest that Lo and Hasan hodzic may be on to something. The manner in which some of the interviewed technicians describe their tools is not too much unlike the discussions carried by behavioral (financial) economists. Both groups appear to share the view that investors sometimes move in “herds” and, by doing so, they can have influence on asset prices. The technicians hope that their charts will let them uncover where the herd is heading, how strong it is, and when it might be about to turn around. The most informative interview segments are the ones in which the technicians describe why they believe their tools work. A common suggestion is that the chart patterns pick up on the interaction between investor psychology and the supply and demand for assets. Unfortunately, most technicians stay away from this why-this-works territory and instead display willingness to accept any method—yes, even astrology—based on whether or not the pattern seems to work.

Except for a brief introduction by the authors, the entire book follows a question-and-answer format. Although some of the answers are both interesting and surprising, some of the technicians’ lengthy responses are both repetitive and unfocused and do little to bridge the gap between technicians and academics. A specific problem with the interviews is that the book assumes that a reader steps in with considerable familiarity with technical methods. For example, the book supposes that techniques such as “Bollinger bands” and “Gann theory” are part of the reader’s tool set. By doing so, the book misses the opportunity to educate its nontechnician readers about what it is that these interviewees do. The authors should have added some editorial comments at least on those occasions when an interviewee steps far outside the realm of what could be expected of an academic reader: “I use a model of the market called the wave principle, which is a robust hierarchical fractal comprising quasi-geometric forms” (p. 78).

Given the amount of work that the authors themselves have done on technical analysis, it would have been invaluable to hear their personal commentary on these interviews. The subtitle of the book, Conversations with Leading Practitioners of Technical Analysis, is, however, misleading. Most of the questions are identical across the interviews. Only rarely does the interviewer follow a technician’s response with a follow-up question. Picking up this book, I looked forward to free-flowing conversations between these technicians and, in particular, Lo, because Lo’s own work is so deeply relevant to technical analysis. (Lo’s other book on financial markets, The Econometrics of Financial Markets, is still today the definitive introduction to empirical microstructure models and asset pricing.) Alas, this book mostly gives a voice to the interviewed technicians. It does not, for example, confront and challenge the technicians with academic arguments against technical analysis.

One problem that comes with the interview format is that the technicians’ voices are not, at least in writing, unique enough. The first part of the book introduces the technicians by transcribing short, self-contained interviews with each of them. However, the second part of the book is organized around separate topics such as “Luck,
Astrology, and Other Unsanctioned Signs,” and pools together the technicians’ responses to these questions. Although I can understand why this is done, only few voices were so memorable that I could connect their responses to the thinking that they have displayed in other parts of the book. It becomes a challenge to keep the names and ideas of all thirteen technicians straight. However, although these technicians’ voices are sometimes muddled, their unbridled passion for the markets offers a wealth of interesting quotes. For example, consider the following description that Robert Prechter offers of the emotions of trading: “The market itself is naked emotion on rampage. When your job is to assess degrees of insanity, how can you remain unemotional? This job is not like building cars. It’s like trying to outwit a pack of murderous inmates in an insane asylum” (pp. 205–06).

The book describes its subjects as the thirteen of today’s top technicians but, beyond this statement, the authors make no mention of the criteria of success that they applied. While some cross-references in the interviews suggest that many of these technicians hold each other in high regard, the book contains no tangible numbers about their successes. Because the main academic concern with technical analysis is that a chart-based strategy cannot beat a buy-and-hold strategy, I sorely missed such performance numbers, no matter how limited and selective the sample is.

The interviewed technicians, more often than not, disagree in their views. For example, while one technician (Shaw) recommends that an aspiring technician would pursue formal economics education (p. 216), another (Prechter) cautions that “[e]conomics has to be unlearned, so avoid that” (p. 215). Similarly, while some technicians list moving averages as their favorite indicators, others assert that these are the least useful indicators. Most of these technicians, however, share the view that some unquantifiable intuition and feeling about the markets is of crucial importance. “Every once in a while we would come across an example where everything looked good, and I would say, ‘Yes, but I sold it today.’ Students would ask me why, and I couldn’t totally explain it. Something just didn’t look right to me” (p. 187).

Many financial economists will probably be interested in reading about these technicians’ perceptions about themselves. Their feelings range from deep disappointment for the lack of respect to noting that behavioral finance is claiming their territory: “after condemning us for all these years, they’re now basically copying what we do, renaming it, and trying to take credit for it” (p. 124). Equally interesting, for a similar voyeuristic reason, are these technicians’ occasional displays of self-awareness. One interviewee faults technicians for saying a lot about nothing: “Another issue I have with technicians is that they don’t really recommend. They tell you that things like rails are developing an interesting pattern . . . What does that mean?” (p. 121). In an occasion, Robert Prechter even comes across sounding like Malkiel: “But let’s be fair: Technical analysts can be excruciatingly embarrassing to their own profession” (p. 125). However, by the end of the book, I had come to share Lo and Hasanhodzic’s assertion that each of the interviewed technicians is very sensible, intelligent, and self-aware about their work. None of them, for example, claims that technical analysis is a miracle tool that one can just switch on to become a millionaire.

In conclusion, the book does not quite deliver on the promise of bridging the gap between technicians and financial economists. A technician probably finds the book interesting because it offers insights on how these top technicians think and how they approach the subject. For them, however, the book offers little discussion on the issues that academics have with technical analysis. Financial economists, on the other hand, will probably not significantly alter their beliefs about technical analysis based on these interviews, no matter what prior beliefs they hold about the subject of market efficiency. Because so much is left unsaid about the methods that these technicians use, and why the technicians believe their methods work, the gap between the two camps remains largely unchanged. My view about the book may, however, be negatively biased because I felt that the book missed a historic opportunity. I had expected for greater things to happen when a practicing technician and a classically trained financial economist are trapped together in the same room.
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I Health, Education, and Welfare


In the book Global Lessons from the AIDS Pandemic, Bradly Condon and Tapen Sinha provide an overview of the global AIDS epidemic. Despite an existing vast body of literature on HIV/AIDS across fields and within economics, this book is a contribution to the field in that it presents a number of important topics that have received less attention but nevertheless are important. One of the main strengths of the book is the authors’ discussions related to incentives of global actors and effects of policies related to HIV/AIDS treatment and prevention. This emphasis is in contrast to much of the literature on HIV/AIDS within economics that has focused mainly on the determinants and consequences of the spread of HIV/AIDS within macro- and microeconomic frameworks.

This book is an enormous endeavor and is comprehensive in scope. The authors begin in chapters 1 and 2 by providing the reader with the background of the origins and nature of HIV/AIDS as well as outlining recent strategies in both developed and developing countries to fight the spread of the disease. Chapter 3 discusses insurance, mortality, and treatment costs as well as some of the challenges of measurement and estimation of HIV/AIDS prevalence. Since measurement is such an important concern for HIV/AIDS research and policy, it was interesting to consider measurement in the context of insurance, rather than as an issue on its own. That said, there has been relatively little written on insurance and HIV/AIDS and I found the discussion to be interesting.

Chapter 4 discusses the economics of HIV/AIDS and is likely to be the most familiar to economists who research HIV/AIDS. The chapter presents an overview of the relationship between AIDS and human capital accumulation, fertility, and economic growth. Related to the discussion of the economic implications of the spread of the disease is a section on the cost-effectiveness of scaling up prevention and treatment programs. There was relatively little discussion of microeconomic models of behavior related to HIV/AIDS, rather an in-depth case study on Uganda and a brief outline of epidemiological models from the Rakai project in Uganda. As a development economist studying HIV/AIDS, this chapter lacked much of the recent literature written by economists studying HIV. Specifically, there was no mention of what works and does not for HIV prevention, worker productivity and HIV, and specific models of behavior related to prevention, testing, and adherence to ARVs. This is not necessarily a weakness of the book or of this chapter specifically, rather an indication that the book’s main focus is on political economy and issues related to incentives of global actors rather than on microeconomic models and behavior related to HIV/AIDS.

The second half of the book (chapters 5 through 8) discusses patents, financing of HIV/AIDS programs and research, and the roles of multilateral, private sector, and global organizations (e.g., the World Bank, IMF, Global Fund, and World Health Organization). These chapters were useful to read in order to gain a global perspective on the broader picture of HIV/AIDS financing and policies, however, I was surprised that there were no references to recent literature on the economics of HIV/AIDS vaccine development that make similar points (see, for example, Kremer and Snyder 2006). The last chapter discusses the future of the HIV/AIDS epidemic and global fight against the disease linking both prevention and treatment with human rights.

This book should appeal to a wide audience. It should be informative to those wanting an overview of the fight against HIV/AIDS within a global political economy framework. The book could also make an excellent undergraduate or masters textbook on the political economy of
global diseases, more generally. The authors use the framework they set up discussing HIV/AIDS to compare to other global diseases such as SARS, the flu, diabetes, and malaria. While maintaining an intellectually rigorous theoretical foundation for each subject, the text is, for the most part, free of mathematics and contains a large number of case studies that provide real-world examples. I applaud the authors for maintaining a balance in their examples, not only discussing HIV/AIDS in Africa (e.g., South Africa, Uganda, Zambia, Rwanda) but also presenting a variety of case studies in middle and upper income countries (e.g., Brazil, Thailand, Japan, Australia, Mexico).

I enjoyed reading the book and would recommend it to those wanting to learn more about global HIV/AIDS financing. I was, however, disappointed by the limited discussion of many of the nuances related to HIV/AIDS, policy, and research. Measurement of HIV and AIDS itself, sexual behavior, behavioral responses, and the effects of HIV/AIDS is extremely difficult. Perhaps one reason why we have made such slow progress in the fight against HIV/AIDS is that we have very little rigorous evidence of which policies really work and which do not. Measuring effectiveness is complicated by endogenous program placement, biases in self-reported sexual behavior, limited survey and bio-marker data available in developing (and developed) countries, and incentives for organizations working on HIV/AIDS to “find” that their programs are successful. The last sentence of the book states: “... while HIV/AIDS continues to pose a significant threat to public health, there are many signs that progress in fighting this pandemic can and will continue, as knowledge gradually replaces ignorance.” My hope is that, as we increase our knowledge and understanding of the complexities of HIV/AIDS in a rigorous way, global actors can implement policies that will be effective in mitigating the effects of this global disease. This book, usefully, outlines many of the issues that these actors should consider.

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Several reasons make higher education in Asia a very important topic for scholars and policymakers. First, higher education was not only an important engine of growth to explain the East Asian miracle in the past but it will be also key to shift from “intensive” growth based on accumulation of factors to a growth based on technological progress in the future. Second, part of the Asian miracle, especially in India, was based on the development of high tech service exports, which depend specifically on higher education. Third, countries in Asia are the main “exporters of brain” in form of students who study abroad. Fourth, (the access to) higher education is fundamental to ensure an equitable income distribution, especially in countries that have undergone rapid economic development; keeping open the access to higher education is so a priority in Asia. The Annual World Bank Conference on Development Economics, which was held in Beijing in 2007 and whose proceedings the book under review presents, was timely dedicated to these topics.

In the initial keynote speech, François Bourguignon focuses on the need of expanding the supply of educated workers in order to maintain an equitable income distribution despite the pressure of the technological progress, which requires more and more skilled workers and bids up their wages. More broadly, an equitable income distribution not only ensures political stability but also creates a middle class, which is, in turn, the key constituency for expanding even more (public) education.

This brings us to the important topic of financing of higher education, which is touched upon by the contributions by Daniel Levy and Nicholas Barr. Private and public sectors coexist in the majority of countries in the world but, broadly speaking, the public sector is prevalent in Europe while the private sector is prevalent in the United States, which is basically the only country where elite private schools are common. Both models have clear advantages and disadvantages. The American system provides a better link between the university and the workplace, provides better incentives to research, and costs less to the public.
finances. The European system is cheaper for students and allows wider access. Where does Asia stand? Asia is probably in a stage of transition from a mostly public system to a more articulated system in which the public and private sectors coexist, sometimes competing and sometimes complementing each other. As also discussed in the comments by Kai-ming Cheng, technological progress and increased integration will lead to the need of further collaboration between private and public sectors, the policy challenge will be how to combine fruitfully the two sectors. The contribution by Nicholas Barr takes up this challenge and discusses carefully the various trade-offs between access of higher education, quality, size, and fiscal costs. A strong message that comes from this contribution is that higher education should be seen in the broader context of primary and secondary education; after all, tertiary education is just a phase of a life cycle.

Does the current higher educational system serve well Asian countries with their increasing demand for skilled workers? Pawal Agawal argues that, in India, the public education sector is increasingly unable to produce workers with adequate skills. However, the private sector is hampered by a dysfunctional regulatory framework, which creates perverse incentives and produces graduates of unequal quality. This pessimistic view calls for reconsideration of the role of the private sector and the need to modernize the regulatory framework. The need for a good relationship between private and public education sectors is even more important in the context of technology as discussed in the contributions by Feldman, Stewart, and Lundvall.

Finally, a key feature of the educational system in Asia is that many students pursue higher education abroad. In the recent past, this was seen as a possible problem (hence the expression “brain drain” to design skilled labor migration). This view has changed dramatically in the last fifteen years as new theoretical and empirical studies have shown that the reality is much more complex. For instance, as Mark Rosenzweig notes in his contribution, a large fraction of students schooled abroad return to their home countries, so that “brains circulate” more than “be drained” from a country to another. This view of skilled migration is surely more optimistic of the old view, which emphasized the “drain” aspect, but also poses challenges for the policymakers: for instance, how do we give incentives to the best and brightest to study abroad (and to come back)? It is difficult to combine the need to compensate skills to attract students schooled abroad with the desire of achieving a more equitable income distribution as highlighted before. This is not discussed in the book but will provide the topic for future debates.

Overall, the different papers collected in this conference volume give a general message that can be summarized as follows: (1) higher education has been key to Asian economic development and it will play an even more important role in the future as growth will be more technology-driven; (2) in addition, an increase in the supply of skilled workers will also limit the worldwide tendency to larger skill premium with corresponding worsening of the income distribution; (3) the need to increase the supply (and the quality) of higher education presents considerable fiscal costs, which calls for the involvement of the private sector in higher education; (4) the involvement of the private sector in higher education is also desirable to improve the link between education and the labor markets and to foster innovation; (5) the collaboration between private and public sectors is not easy and requires careful design of the incentives; (6) foreign education is a key component of higher education; the policy issue is mostly how to design a system so that skilled workers circulate among countries rather than migrate permanently; and (7) in designing this, we should keep in mind that skilled workers respond to incentives.

In conclusion, this book will provide policymakers and scholars with a useful overview of the main topics on higher education and a road map for policy action.

ANTONIO SPILIMBERGO
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Economic Development, Technological Change, and Growth
Bond Markets in Latin America: On the Verge of a Big Bang? Edited By Eduardo Borensztein, Kevin Cowan, Barry Eichengreen, and Ugo
The term and maturity mismatches of government and corporate borrowers evidenced by the Asian and Russian crises of 1997–98 led many emerging economies to conclude that it was necessary to foster the development of domestic bond markets. These markets were not only seen as an option to provide long-term local currency financing to governments and corporations but also as a mean to improve the efficiency of capital allocation, reduce the impact of banking crises on the real economy, and provide important price signals for the conduction of monetary policy and private investments. The enthusiasm with domestic bond markets resulted in formal initiatives aimed at developing them, such as the Asian Bond Markets Initiative and, more recently, the Global Emerging Markets Local Currency Bonds program, sponsored by the International Financial Corporation.

Not surprisingly, Latin American countries also sought to develop their domestic bond markets further, especially the corporate segment, which was largely inexistent in most countries in the region by the mid 1990s. “Latin American Bond Markets: At the Verge of a Big Bang?” provides a comprehensive and authoritative review of the development of domestic (and international) bond markets in the region and the steps taken in several countries to expand them since the early 1990s. Going beyond the simple characterization, the volume also aims to identify the factors behind the expansion of these markets in several Latin American countries during 1990–2005, and to discuss policies to develop them further.

The volume is an outgrowth of an Inter-American Development Bank research network project on bond market development in Latin America, structured as a collection of nine chapters. It includes a theoretical model of the benefits of developing domestic bond markets in emerging economies, a cross-country study of the determinants of bond market development, six country studies covering the cases of Argentine, Brazil, Chile, Colombia, Mexico, and Uruguay, and a summary chapter taking stock of the findings. This mix of descriptive statistics, theory, and microeconomic and macroeconomic evidence makes this volume a comprehensive source and a useful reference for anybody interested in the subject within and outside the region. Furthermore, most of the data collected for the country case studies is publicly available over the internet; an additional contribution of the volume that also makes it a useful starting point for further research on the topic.

Looking at each of the goals the volume sets for itself is probably the best way to assess its contribution. The first goal is to characterize the development of Latin American bond markets, and the volume largely succeeds here. Many summary statistics give the reader a comprehensive picture of the state of development of various aspects of these markets at different levels of aggregation. For instance, the summary chapter compares the size and composition (public, corporate, and financial) of domestic bond markets in Latin America with other regions, and each of the six case studies describes in detail the current state and recent history of domestic and international bond markets in the covered countries. Another chapter characterizes the correlations between various aspects of bond market development and a host of variables, paying special attention to Latin America and emerging markets.

In addition to standard statistics on market capitalization, two interesting but only partly explored stylized facts stand out: first, LAC bond markets do not look that small when measured relative to the size of the financial sector. This finding could lead to reframe the quest for the low development of Latin American bond markets as a quest for the overall financial under-development of the region, with the advantage that there is a broader literature on the determinants of financial development. Second, evidence throughout the book shows a positive correlation between a firm’s size and its ability to issue bonds. One of the chapters further pursues this correlation by conjecturing that the underdevelopment of LAC bond markets might result from Latin American countries having too few large firms that may find useful to finance through bonds. Regrettably, none of these two facts is pursued beyond some back-of-the-envelope calculations. Digging deeper into them could have given a new perspective into the fundamental causes
behind bond market underdevelopment in Latin America.

The second goal of the volume is to identify the factors behind the growth in Latin American bond markets in the early 2000s. Here the volume faces more difficulties. The evidence in favor of the factors identified as important for this recent growth is more circumstantial than systematic because of the inherent difficulties in identifying causal relations among macro variables. For instance, the book attributes an important role to macro stabilization largely because bond markets took off after the implementation of stabilization plans in several countries. However, the cross-country regressions reported in chapter 9 find no clear correlation between variables related to macro stabilization (interest rate volatility, government debt, or the exchange rate regime) and bond market development and, among the firm-level studies, only the chapter on Mexico identified a negative correlation between inflation and a firm's probability of issuing bonds. The case is similar for the role of financial crises, plausible, but not clearly supported by the evidence presented in the volume.

The evidence on the determinants of the decision to issue bonds at the firm level, or on the constraints to issuing or investing in corporate bonds, comes from micro-econometric studies and surveys. The analysis is informative and innovative (few papers have tried to tackle this issue), but relies on some strong assumptions. For instance, three chapters estimate the relation between a firm's characteristics, such as size, profitability (ROA), and leverage, and the decision to issue bonds using panel data. However, the only step taken to reduce endogeneity concerns is to use lagged values of those characteristics, which assumes that firms do not time their bond issuance following years of good balance sheets. In addition, while frequently recognizing that firms that have issued bonds in the past tend to do it again, the estimated models do not formally consider the possibility of unobserved heterogeneity across firms and use pooled Probit to estimate the parameters. This method provides correct inference only under strict exogeneity of the conditioning variables, which does not permit including lagged dependent variables, and even in the simple case of unobserved heterogeneity requires computing robust standard errors. The remaining country case studies using truncated Tobit or 3SLS based their analysis on similar identification assumptions.

The firm and investor surveys conducted in each of the chapters unveil interesting stylized facts, such as the concern of firms with the size of the market and issuance costs, but the little documentation provided makes difficult their interpretation. For instance, two of the four chapters conducting firm surveys do not discuss the sample selection process or representativeness and, while most chapters acknowledge important attrition, none discusses its impact on the interpretation of the findings.

The last goal of the volume is to discuss whether policies aimed at promoting bond market development will have an effect on economic performance. The problems to identify the factors behind bond market development make this goal hard to achieve. The discussion is intelligent and the proposals likely are steps in the right direction, but they rely more on the good judgment of the contributors and editors than on solid empirical evidence. For instance, the empirical support of proposals to reduce the cost of issuing bonds through standardization and securitization comes from potentially biased correlations documented on country studies and on firms' surveys that suffer from attrition. Other conclusions, such as those suggesting that policies reducing the cost of issuing traditional instruments will likely benefit only a few large firms, while plausible, forget general equilibrium effects: if large firms can obtain finance in markets, small opaque firms may have better access to banks' capital. Nevertheless, most proposals are reasonable and they are unlikely to harm the goal of fostering bond market development.

Going back to the proposals for reducing issuance cost with the benefit of hindsight, it is especially interesting to notice the volume's transversal emphasis on securitization. Although the idea of spreading the fixed cost of issuance is intuitively appealing, the little (if any) discussion of the agency problems involved in the securitization process highlights the secondary role given to these issues before the current crisis. In fact, the only part of the volume that addresses some of these issues is the theoretical model presented
in chapter 2, which argues that originating banks retaining the junior tranches of the structured products would have the incentives to restructure loans after a shock. Nowadays we know that this is not enough and that restructuring of securitized loans may be extremely difficult.

Overall, this volume is a valuable and useful reference on the state of development of bond markets in Latin America. While generally well written, the reading sometimes feels a bit dry because of the common template followed for the six case studies. From a scholarly perspective, this volume is certainly not the last word on the causes of bond market development or firm’s corporate financing choices but it contains a lot of information, stylized facts, historical accounts, and interesting ideas that makes it recommendable not only for policymakers, but also for academics interested in these issues. After reading it, you will have learned almost everything that there is to know about Latin American bond markets.

Claudio E. Raddatz
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This book introduces an innovative methodology and utilizes it to study an important problem framed in a novel way. It uses what the authors call financial diaries of low-income households in India, Bangladesh, and South Africa to understand the financial lives of people living in poverty. The authors find that their respondents lead surprisingly active and complex financial lives, not in spite of but because of their precarious position. The research also identifies some useful lessons for improving the products and performance of microfinance institutions (MFIs). The potential limitations of the small sample size and the possible influence of researchers on the respondents are acknowledged by the authors and do not detract from their broad achievements. The work is likely to spur related research and lead to improved microfinance policies.

The authors—Daryl Collins, Jonathan Morduch, Stuart Rutherford, and Orlanda Ruthven—include academics interested in practical applications of their research and practitioners interested in improving the effectiveness of their programs.

The research problem addressed by the authors is a basic one. Most economists interested in household behavior often can only view a snapshot with household surveys or, at best, a handful of successive snapshots through a panel dataset. As a result, they miss the very active churning between observations and do not document the extremely active household financial management. This may limit the insights that could be gained to provide products or training that would help the people living in poverty to improve their situation.

To try to address this concern, about 250 households were interviewed approximately every two weeks for a full year, recording and compiling their financial and spending behavior in minute detail. The authors call these records “diaries,” although they are recorded by interviewers because the respondents are often illiterate or semi-literate and may overlook many items that they do not realize would be of interest to researchers. The authors’ method is somewhere between development economics and development anthropology. Unlike many other studies that examine human behavior, this study collects and utilizes uniformly defined quantitative evidence on very specific economic and financial behaviors. It took two or three visits to gain trust and then some additional visits to identify all the unusual savings, credit, and insurance vehicles that the respondents were using simultaneously. The authors were, thus, able to collect information that would not otherwise have been obtained.

I would point out ten general findings introduced through the book that I found striking and important. This is not intended to be an exhaustive list.

First, income is highly variable. The book shows implications of what the authors call the “triple whammy” of incomes that are both low and uncertain, within contexts where the financial opportunities to leverage and smooth income to fit expenditure are extremely limited” (p. 16). The book presents evidence that income
of respondents was irregular with hard to predict patterns and that, despite serious risks, few opportunities for insurance were available. Of course seasonal farm work is just that. But, on many days, nonfarm respondents also earned no income at all. Jobs that looked permanent turned out not to be and some who apparently had income from formal (registered) sector jobs turned out to be irregular contract workers. Income from activities like vending and rickshaw driving varied greatly from day to day. Periods of decent incomes were followed by injury or sickness. These facts are generally known but they can be seen in new light in a study positioned between the large household surveys on the one hand and individual family case studies on the other. As the authors summarize, “one of the least remarked-on problems of living on two dollars a day is that you don’t literally get that amount each day. The two dollars a day is just an average over time . . . “ (p. 2).

Second, assets are actively churning. Although we know spending on consumption is one variable (for example switching from three meals a day to one so as to preserve a minimum of assets), people living in poverty also very actively manipulate tiny assets and liabilities. There is a strikingly high cash flow into and out of debt and savings in relation to earnings. This “cash flow intensity of income” was such that “In India, households shifted, on average, between 0.75 and 1.75 times their incomes . . . In South Africa, the monthly turnover in cash flows was . . . about 1.85 times the monthly income” (p. 32). Thus, in response to irregular incomes, even those receiving less than $1 a day do not consume all of it at the end of that day. The authors ask, “how do you make sure there is something to eat and drink every day, and not just on the days you earn? . . . How do you deal with emergencies? . . . how do you put together the funds you need to afford . . . a home and furniture, education and marriage for your children, and some income for yourself when you’re too old to work? In short, how do you manage your money when there is so little of it?” (p. 2). People living in poverty go to great lengths to avoid risks of living hand to mouth because this would be extremely dangerous. So they lead highly active financial lives.

Third, there are a great many short-run instruments. The series of household balance sheets presented in fascinating detail in the appendices of the book shows respondents are saving by such means as hiding money at home, leaving it with a neighbor for safekeeping, paying into a burial society and an accumulating saving and credit association, giving credit to purchasers of their products, paying down MFI or other loans, buying MFI life insurance, remitting cash home that they may benefit from in some form later, and, perhaps quite riskily, facing wage arrears. In the same year and often at the very same time, they are borrowing by such means as taking shop credit, benefiting from a relative’s wage advances, going into rent arrears, getting interest free loans from neighbors, taking informal loans with interest with or without pawning, selling commitments to future labor, buying from small stores on credit, and topping up their MFI loans that they otherwise pay down steadily. A remarkable finding is how many of these broadly defined financial instruments are used by a single family in a single year. The reported summary statistics is that over the course of a year “in Bangladesh the average number of different types of instruments was just under 10, in India just over eight, and in South Africa, 10” (p. 15). No household used fewer than four types. Many individual instrument types are utilized many times during the year, notably the interest-free loan. The use of these instruments is in constant flux. The lending and borrowing frequencies are high. Most of the people studied get into and out of small levels of debt quite rapidly. Loan durations are often very short and interest can be largely thought of as a transaction fee. Annual or biannual survey snapshots miss many of these instruments for any one family; this is, in part, because some of these are not understood by respondents (or, initially, even by researchers) as qualifying as financial instruments. Sometimes they are not remembered and, in panel datasets, instruments may be taken up (borrowed or lent) and then closed between surveys.

Fourth, households often find ways to fund (what are for them) large expenditures. Households use a wide range of techniques to agglomerate lump sums that are large in relation to income flows. These include Rotating Savings and Credit Associations, Accumulating Savings and Credit Associations, informal savings clubs, simultaneous
borrowing and saving, and joining commitment savings products. Available credit can help expand a business and can help smooth consumption. By improving intermediation, it will be possible for more people living in poverty to agglomerate enough money to pay for education and health care when it is needed, providing a big boost for other development objectives (p. 176).

Fifth, the poor are most commonly borrowing from each other. The authors observe that small withdrawals are far more frequent than deposits into savings, and much more cash flowed into and out of loan balances, even though saving was ubiquitous. Eighty-eight percent of the borrowing in Bangladesh and 94 percent in India was informal, but the researchers concluded that the classic moneylender was only turned to as a last resort. They note that: “Better off people might manage money on an everyday basis with a credit card. For the poor households in our study the main strategy was to turn to each other, using one-on-one lending and borrowing between friends, family, and neighbors” (p. 49). Sometimes the flow is in both directions, such as two grandmothers smoothing government payments that come to them at different times of the month, but often the poorer person borrows regularly from a less poor person who feels some sense of responsibility. The authors argue that these personal loans are to some degree convenient and flexible but they stress that they lack reliability, privacy, and transparency. These are the three characteristics that they emphasize are needed in the next set of new MFI products, which are still too inflexible and too oriented toward microenterprises. Also implied in their arguments is the need to lessen the burden of high transaction costs to the poor of having to borrow from (and extend loans to) so many different people.

Sixth, as the authors put it: “poor people need financial services more than any other group” (p. 14). The book is convincing that, in some respects, the financial lives of people living in poverty are more active, and more demanding of attention, than those of most middle income Americans. The amounts are typically tiny, and flows into and out are very rapid, so “we need to pause for a moment and adjust our perspective if we are to understand the real importance of these poor-owned portfolios” or to even to fully understand these balances as “portfolios” in the first place (p. 34). “The diaries show that it is because of, not in spite of, low and uncertain incomes that poor people are extremely active in financial intermediation, through whatever means are available to them” (p. 176), as households “meet their needs by patching together sums of money from different sources.” But while “single solutions are rarely comprehensive,” they “don’t need to be so in order to be useful.” This points up “the power of well thought out partial solutions” (p. 67).

Seventh, instruments are sometimes vaguely defined. In a striking example, money is “placed with” a neighbor. Is it a loan or a savings deposit? The respondents seem to resist answering. Given that respondents are open about so many intimate details of their finances, embarrassment is not a likely reason. Rather, the answer might be that it is both debt and saving, as the placement could morph from one to the other depending on the varying needs of the household with whom the money is “placed.”

Eighth, behavioral economics is insightful here. People living in poverty would often prefer to borrow at high interest than draw down savings, and the authors conclude that a reason is self-motivation, as respondents report that, with high interest, they know they will work hard to pay loans down quickly and they appreciate how difficult it had been for them to save. The behavior makes sense but not without recourse to behavioral economics.

Ninth, the illiterate poor can actually keep track of all these instruments. It is natural to wonder how. The authors provide two quotes that help: “we talk about it all the time, and that fixes it in our memories” and “these things are important—they keep you awake at night” (p. 17).

Tenth, there is plenty of room for improvement in MFIs. Product innovations could improve the security and productivity of people living in poverty. These include loans explicitly geared toward nonbusiness purposes, products reflecting the tiny savings and debt amounts that people living in poverty need and use, new types of long term commitment savings products, improved safety and reliability of various savings and insurance activities, and new savings products that provide insurance for the difficult-to-quantify (and widely
varying types) of risks faced by people living in poverty. Such products could also help poor people overcome demands of family and friends, and their own predictably time inconsistent behavior.

Comparing behavior of borrowers before and after reforms at Grameen (known as Grameen II) is interesting. Financial lives in saving and borrowing is still very active and relatively diverse, but now well over half of borrowings is through MFIs “to shift some day-to-day money management into savings and loan accounts” (p. 167). The new flexibility from Grameen in savings amounts and timing did not seem to lead to much increase in final savings amounts but led to a great increase in amounts both deposited and withdrawn. Individuals studied benefited in being able to smooth irregular incomes and expenditures. The diarists also took advantage of the ability to top up loans back to the limit before fully repaying.

Going forward the authors conclude there are three major opportunities for MFIs to use the study’s insights to improve the “portfolios of the poor.” New products can help households manage money on a day-to-day basis, building savings over the long term and enabling borrowing for a wider range of legitimate uses. MFIs can make contributions to each by liberalizing and expanding their products, taking small scale savings and making small loans for members on demand, expanding the term of commitment savings mechanisms, and allowing nonbusiness loans.

Of course, there are a few caveats to the analysis. First, as the authors acknowledge, it would be valuable to have a larger sample size for obvious reasons. Second, if the book gives any consideration to intrahousehold bargaining over finances, it is not systematic; this is surprising both because the development literature has given so much attention to such bargaining, and because microfinance has focused on lending to women. Third, the authors include poor, moderately poor, and nonpoor respondents but do not seem to include many of the poorest of the poor, who may live much more hand to mouth than the respondents in this survey and may need special attention. This is not a major criticism—such inclusion is hard. On the contrary, this book may open up new methods for researching and assisting the ultra-poor. Fourth, there is a relatively thin attention to the agricultural poor, despite their large share among poor people as a whole. Most, though not all, of the subjects appear at least to either live in urban slums or engage in rural off-farm work. Fifth, the interviewers may also have inadvertently influenced the behavior and answers of the respondents. For example, “We recorded, verbatim, especially striking comments” (p. 209). Would this lead to more of them? Did recording transactions make respondents aware of them and lead them to adjust their behavior? The respondents sometimes said their discussions with the researchers had helped them, and the authors remark that this gave them some pause. None of these caveats detract from the importance of the study.

This is a pathbreaking book. It establishes the unexpectedly active and complex financial lives of people living in poverty and the methodological innovation is a worthy contribution in itself. Economists interested in poverty and microfinance will benefit from reading the book. Financial economists are likely to find it fascinating reading that may spur research. But the book will also be of interest to noneconomists, including other social science and business scholars as well as microfinance and poverty program practitioners. They will be delighted to find that it is extremely accessible to them.

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The book reads like a handbook of how to measure and interpret inequality of opportunity. The first two chapters explain why we should look at inequality of opportunity and how to measure it. The rest of the book shows the many different ways to empirically explore it. Development
economists have always been interested in how to measure poverty. Amartya Sen’s philosophical contributions have also pushed economists to think deeply about what aspects of poverty are important. For many years, there were essentially three major concepts of economic justice—utilitarianism, Rawlsianism (John Rawls 1971), and libertarianism (Robert Nozick 1974). The main point of Rawls was that we should focus on the least well-off, while Nozick emphasized personal responsibility. Equality of opportunity is a synthesis of the two ideas. There are things people should not be held responsible for (one’s parents, birthplace, gender, skin color, etc.). There are also things that people should be held responsible for (effort in school or work, personal health choices, budgetary choices). The idea of equality of opportunity as an appropriate way to think about economic justice started coming to the philosophical forefront with Richard J. Arneson (1989). It was then formalized by John E. Roemer (1998). More recently, the World Development Report 2006: Equity and Development picked up on the importance of equality of opportunity in developing countries. Measuring Inequality of Opportunity in Latin America and the Caribbean goes one step further by examining inequality of opportunity at depth in the titular developing region.

The book uses a D-index as an intuitive measure of inequality of opportunity. The index takes the average opportunity within a circumstance group and compares it with all the other groups to measure how far apart the different opportunities are. The different types of inequality of opportunity are then aggregated into a Human Opportunity Index. The second and third chapters focus on children’s access to basic goods and services. A multitude of data sets are used to compare and contrast inequality of opportunity for children’s access to education, sanitation, water, and electricity. This is the least controversial chapter because it is difficult to argue that a child is responsible for his circumstances (in this case gender, place of residence, and household characteristics) or that his effort could in any meaningful way influence the outcomes of interest. One would be hard pressed to find a politician so cold-hearted as to argue that young children are responsible for their lack of access to clean water.

Chapter 4 takes the more controversial approach of measuring inequality of opportunity for adult household income and expenditure. I say controversial because it is difficult to know how much effort an adult is making toward improving his or her economic situation. The book tries to get around the controversy by separating inequality in economic outcomes that are due to circumstance (here defined by adult’s birthplace, gender, race, ethnicity, parents’ education, and father’s occupation) from those that are due to effort or luck. I like the idea of decomposing inequality into that from effort and that from circumstance. However, the book does not totally succeed (which it humbly acknowledges) because an adult is responsible for his or her choice of spouse, number of children, financial decisions, and occupation decisions. It is not explained why these choices are wiped away by averaging within circumstance groups and then comparing across groups.

The last chapter of the book focuses on inequality of opportunity in educational outcomes. Although we are in the relative safety of looking at children’s standardized test outcomes, this section has the same problem that looking at economic outcomes has, but that looking at basic services does not. We do not know how much effort a child is putting into his or her schooling. The most informative analysis is the comparison of the distributions of test scores for the different circumstance groups, allowing the reader to visualize how top, middle, and lower students compare. This is the approach that Roemer takes, but is only briefly explored in this book. The result is an interesting, but ultimately not completely satisfying look at factors that influence educational achievement. For example, the book compares the Latin American countries to OECD countries and finds that inequality from lack of opportunity is not much more of a problem for the developing countries. The authors do not explore the implications of the fact that most developed countries may have grown without a huge rise in equality of opportunity.

It is interesting to see the many ways one can examine inequality of opportunity, yet the one aspect that is lacking is what to do with this information. How useful is it for policymakers to know whether equality of opportunity is going up or down and how their country compares to other
countries? Although the emphasis on equality of opportunity is relatively new in development economics, the policy implications from the book are not that different than if one took Sen’s capability approach or Rawls’s primary goods approach—economic development necessitates providing more basic needs to the worst off. The main insight may just be to make these policies more attractive philosophically to policymakers. It is harder to argue against providing opportunities for the poor to improve their own lives than against lump sum transfers to the poor.

My general complaint about the equality of opportunity literature is that it is not at all clear how we should go about improving equality of opportunity. Is it better for universities to put higher weights on the admission application of a student from a poor socioeconomic background rather than improve that student’s socioeconomic background directly by giving resources to his mother for better prenatal care, free health care to the child while he was growing up, money for better housing, improved police forces to make his living conditions safer, and spending more on his school? In other words, is it better to change the child’s circumstances rather than just his probability of attaining something given his circumstances? The authors have written an excellent “how-to” book for teaching someone how to calculate and analyze inequality of opportunity in developing countries. The book shows us how to identify the particularly disadvantaged groups in countries, which is a start. The next step in this area of research should be to determine which policies can best help these groups.

References

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P Economic Systems


Introductory economics textbooks typically list four market failures that may justify government intervention in markets—imperfect competition, externalities, public goods, and asymmetric information. Over the last few decades, research in behavioral economics has highlighted a fifth possible “market failure”—individuals may fail to behave in their own self-interest. Peter Ubel’s book, Free Market Madness, provides an overview of the evidence that people make mistakes in pursuing their own well-being and argues in favor of paternalistic policy interventions to prevent those mistakes. The target audience is the educated public, particularly those who might have been libertarians until having read this book.

Ubel, a professor at the University of Michigan Medical School and a leading researcher on the psychology of risk perception, is ideally suited to write a popular book on this topic. He is an excellent writer who engages and entertains while he educates. Because of his wide-ranging expertise in psychology, philosophy, medicine, and behavioral economics, he can skillfully interweave research findings and perspectives from multiple disciplines, while accurately representing each.

The book is divided in four parts. Part I explains the classical economic approach to behavior, with overeating as a case study. The reader is treated to a brief history of economic analysis from Adam Smith’s specialization of labor through Francis Edgeworth’s indifference curves through recent rational choice analyses of obesity (e.g., David M. Cutler, Edward L. Glaeser, and Jesse M. Shapiro 2003). Here, as throughout the book, Ubel avoids a simplistic good-or-evil view of markets, emphasizing how markets can generate revolutionary advances in medical treatment, like insulin shots for diabetes, while at the same time generating “advances” in processing of fatty foods that lead to obesity and make diabetes treatments more necessary.

Part 2 chronicles the emergence of behavioral economics, beginning with Daniel Kahneman
and Amos Tversky’s early work in the 1970s and ending with the recent proposals by leading behavioral economics researchers for cautiously paternalistic government policies. Ubel is supportive of Richard H. Thaler and Cass R. Sunstein’s (2003, 2008) “libertarian paternalism”—which advocates only policies that help the irrational without limiting freedom at all, such as government-mandated default options that are set to be appropriate for typical preferences but which easily can be overridden—as well as Colin Camerer et al.’s (2003) “asymmetric paternalism”—which advocates only policies that help the irrational a great deal while limiting freedom only a little, like taxes on sin goods. However, Ubel argues that, even if individuals were defaulted and taxed into better behaviors, they would continue to harm themselves in myriad ways, e.g., by eating too many desserts and committing to too few workouts. For these reasons, in order to promote individuals’ well-being, society should experiment with paternalistic policies that stray less timidly from libertarianism.

Part 3 surveys the evidence that psychological factors ignored by the classical economic approach help explain overeating—factors that include limited self-control, the social contagion of peer behavior, and a host of subtle, unconscious influences that lead to mindless eating.

Part 4 discusses additional biases that affect a variety of important life decisions. People choose to live too far from work because they systematically mispredict how miserable commuting will be. Information provision may not help because people frequently make decisions based on feelings, rather than information. For example, Ubel has found in his own work that individuals are significantly more concerned if told their risk of a stroke is 120-in-1,000 than if told it is 12-in-100 because more people are described as having a stroke in the first case, making the risk feel larger (Brian J. Zikmund-Fisher et al. 2008). Marketers exploit these biases under the guise of providing information. To take one case, Philip Morris’s parent-targeted campaign that advised parents to talk to their children about smoking actually increased teenagers’ interest in smoking and reduced their concern about tobacco’s harmfulness. At the end of part 4, Ubel argues that the government can and should adopt policies that balance liberty and well-being, and can do so without sliding down the slippery slope into a nanny state.

For economists who are not immersed in the behavioral economics literature, reading the book is a quick and easy way to learn a huge chunk of behavioral economics and economics-relevant psychology. Reading the book is an especially valuable investment for instructors of undergraduate economics courses because its main message—that since we humans are not fully rational, it may be profitable for firms to exploit our decision errors, hence government intervention can improve welfare even absent other market failures—will soon be standard in textbooks. The book is also great as a recommendation for an undergraduate (regardless of amount of economics background) who is looking to learn more about behavioral economics outside of class.

Behavioral economics researchers will benefit less from the book because the main message is already well-known in the literature. However, Ubel brings a fresh perspective in three ways. First, he points out where his own experience as a practicing physician leads him to question the adequacy of an economic model for guiding policy. The rational model of addiction (Gary S. Becker and Kevin M. Murphy 1988), for example, feels incomplete as an explanation for the severe withdrawal behavior exhibited by those who are physiologically addicted to alcohol, such as Ubel’s patient who swallowed three dispensers’ worth of Purell Hand Sanitizer and then collapsed in his hospital room. Second, although Ubel discusses most major strands of behavioral economics research, he puts at least equal emphasis on unconscious influences that have received little attention from economists yet deserve more. For example, in the realm of eating behavior, even behavioral economists may be surprised to learn that people eat more and faster in larger groups, eat less when they can see how much they have already eaten, and think food tastes better when they believe it is less healthy. Finally, Ubel advocates that the government harness the same unconscious influences in order to help consumers that firms use to exploit consumers. Just as putting a skull and crossbones on poison labels deters people from ingesting poison, evocative images might be more effective in deterring
unhealthy eating than dry calorie information, which has proven to be ineffectual.

Although Ubel makes some creative policy proposals, such as teaching techniques for self-control in the public schools, the main limitation of the book is that there are few new proposals that are more aggressive than the cautiously paternalistic ideas already in the literature. A reader who might otherwise be ready to buy into Ubel’s call for taking seriously the trade-off between freedom and well-being may finish the book not being quite sure what he is buying.

References

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Q Agricultural and Natural Resource Economics • Environmental and Ecological Economics

Disasters are a big mess. Everyone understands the literal interpretation of that simple statement; readers of Risking House and Home will appreciate the figurative, economic interpretation. This volume reflects the proceedings of a conference held in honor of the hundredth anniversary of the San Francisco earthquake in Berkeley in 2006. The papers offer a number of insights as to the difficulties in planning for, and reacting to, disasters. Several contributions would serve as useful readings for undergraduate or graduate-level courses on practical considerations in the economics of information as well as urban economics.

The economic problems associated with disasters can be reasonably divided into two categories: planning and reaction. Most of this volume’s contributions consider the former. Alan Berger, Karolyn Kousky, and Richard Zeckhauser lay out many of the important issues involved in preparing for disasters. A rational strategy for preparation would consider the costs associated with certain events, the likelihood of those events occurring, and the potential role of preventive action in mitigating the costs. The rational strategy is imperiled by the near-impossibility of ascertaining the probability of extremely rare events. Planners often exacerbate this problem by failing to incorporate considerations of costs and benefits, or failing to recognize externalities that may occur in disaster planning. The use of levees or reservoirs for flood protection, for example, may increase the likelihood of disastrous flooding at other points in a river system.

The inability to accurately forecast the probability of rare events is also a major stumbling block in the market for disaster insurance. Any actuary will tell you that a fair premium is equal to the magnitude of the prospective loss times the probability of the loss occurring. What if we just don’t know the likelihood of the loss? In the marketplace, those consumers who elect to purchase disaster insurance (an adversely selected group) will flock to the provider with lowest prices, which will happen to be that firm that assigned the lowest probability to the disaster in question. So we get a form of “winner’s curse adverse selection.”
As Howard Kunreuther points out in his chapter on the problems of disaster insurance, this problem is amplified by the correlated nature of risks within a market area. Many forms of household risk—fire, malfunctioning washing machines, cars smashing through the living room window, etc.—are idiosyncratic and can be diversified even within a small geographic region. Not so earthquakes, or hurricanes, or volcanic eruptions. An insurer who writes policies against one of these events, unless they are a large national conglomerate, is putting a large number of eggs in one basket.

But wait—there’s more. Providers of catastrophe insurance are often hamstrung by state regulations, which force them to charge premiums they perceive as too low to be profitable in expectation. In some cases, insurers facing these types of regulations threaten to stop selling policies in a given state. In more than one instance, state governments have stepped in to stop this from happening by offering to reinsure the insurers against catastrophic losses or by getting into the insurance business themselves. George Zanjani offers a description and analysis of one such instance—the California Earthquake Authority. This sort of policy puts taxpayers on the hook for insurance losses.

We all know that the purchase of insurance leads to moral hazard problems. With flood insurance in hand, you can feel free to leave your collection of Faberge eggs in the basement. Government-backed reinsurance creates moral hazard problems for the insurers themselves. They can feel free to write policies for all sorts of disasters at overly reasonable rates, safe in the knowledge that their downside risk is limited by the presence of government-subsidized reinsurance. The role of the market in yielding information about the expected cost of various disasters, through prices, is undone.

The efficient solution to all this, of course, would be to deregulate the market for disaster insurance, at which point all those owners of beachfront property rooted in sandbars on the Atlantic and Gulf coasts would have to pay the piper. Good luck selling that policy to the voters of Florida. Dwight Jaffee and Thomas Russell, in their chapter, offer an alternative, which would be to lend taxpayer money to insurers to pay out claims, rather than write them insurance policies. Jaffee and Russell note that this proposal substitutes credit risk for insurance risk; the economic equivalent of rearranging deck chairs on the Titanic.

To elucidate the challenges in reacting to disasters, the book offers several chapters reviewing (or in one case, previewing) the impacts of specific disasters, including Hurricane Katrina and the terrorist attacks of 9/11. Two chapters deal with the concept of “resilience,” which can be interpreted as the ability of an urban area to rebound from a catastrophe. Presumably, as argued elsewhere by this reviewer, the capacity for rebound depends directly on the underlying demand for location in the area affected by the disaster (Jacob Vigdor 2008).

While the book has its share of highlights and provokes many good thoughts, there is no single chapter that succinctly lays out the issues and integrates the various contributions. The editors’ introduction offers only a few paragraphs of integration before delving into the obligatory summarization of each individual chapter. This leaves the reader with the sense that the whole of this volume is actually a bit less than the sum of its parts—that the principle underlying the collection is convenience rather than coherence. These concerns aside, those readers interested in thinking seriously about the economic side of disaster mitigation and management will find much food for thought in this volume.

**References**


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**R Urban, Rural, and Regional Economics**


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Analyzing markets for differentiated products can be approached in several ways, but the
technique that is most widely used is hedonic price models. Both the theory and the empirical application of these models have been widely used for many years now and there are a number of surveys of the field. Nonetheless, there are a number of unresolved issues in hedonics and the field continues to evolve rapidly. These rapid changes are the motivation for this new collection of essays on the application of hedonics to housing markets. Several of the chapters should be quite useful to researchers in environmental and/or urban economics and to those who deal with differentiated products in other fields.

The book grew out of a conference held in Geneva in 2007. A number of authors who are active in the field wrote papers that were presented at the conference and then revised to form this book. After a brief introduction by the editors, there are two essays on hedonic methodology, four essays on using hedonics to address urban environmental issues, four essays on measuring segregation in housing markets, and an appendix (by Bengt Kriström) demonstrating the steps in estimating a hedonic model. Many of the papers are quite useful because they address unresolved issues or demonstrate the new directions in which hedonic research is moving.

The first chapter is by Laura O. Taylor and is a survey of hedonic methods. Taylor builds on existing surveys of the field, rather than just repeating them. This allows her to emphasize new topics and research that has received less attention in the previous surveys. She has nice sections on various sources of endogeneity in the explanatory variables and the effects of imperfect information in these models. There is also a good overview of welfare measurement in the hedonic model. Even readers who are familiar with earlier surveys should find useful information in this chapter. The other chapter in the “Methods” section is by John R. Knight, who concentrates on the home selling process. This is a topic that has received some attention in the urban economics literature but very little in the environmental literature. Hopefully, Knight’s article will change that. Real estate markets are subject to numerous bargaining, information, and transactions costs that add complexity beyond the simple competitive hedonic model. This complexity makes the interpretation of equilibrium difficult. It also means that time on the market as well as price must be considered. Knight’s chapter provides a nice overview of these issues and access to the existing literature.

The next section of the book is “Applications to Urban Environment Issues.” Jon P. Nelson’s article on aircraft and road traffic noise leads off. Nelson was one of the first to apply modern hedonic techniques to this topic and has written various surveys and meta-analyses of noise research. The chapter here builds on the earlier surveys by concentrating on the most recent studies in the area, while at the same time providing an overview of the issues. Next in this section is a paper by Jean Cavailhès and six coauthors on the value of view. They have some empirical work on the effects of neighboring trees and agricultural land on property values, although some questions remain about their implementation. Ghislain Geniaux and Claude Napoléone have a chapter on semiparametric spatial hedonic models. They discuss General Additive Models and Mixed Geographically Weighted Regressions and provide some empirical results on a comparison of the two. This paper is not an introduction to the models and the empirical results are not emphasized. The final chapter in this section is by Patrick Bajari and Matthew E. Kahn. They use the model developed in Bajari and C. Lanier Benkard (2005) to address the issue of urban sprawl. This chapter is valuable as an accessible description of that extension of the hedonic model. Using a local linear model, they estimate a highly flexible hedonic equation using kernel weights that are a function of product differences and derive random coefficients for the characteristics. They are clear about the assumptions that underlie their results, which allows the reader to evaluate the gains and losses from making those assumptions.

The final section is “Applications to Segregation and Discrimination Issues.” David W. S. Wong leads off with a discussion of various potential indices that one could use to measure segregation. These would be alternatives to using the percentage of each race in the surrounding area, as most economists do. Some of the measures might be useful in other areas in environmental economics, such as biodiversity. Jefferey E. Zabel provides a nice overview on detecting various
forms of discrimination in the housing market while concentrating on using hedonic models to analyze housing price differences by race. He describes four alternative hedonic specifications that have been used for that purpose and discusses the strengths and weaknesses of each. Diane Hite discusses the issue of environmental justice and using the hedonic and random utility models to study this question. It appears that a number of methodological issues still must be addressed. The last chapter, by Patrick Bayer and Robert McMillan, is a useful overview of racial sorting and how to detect it. A demonstration is provided of why the significance or even the sign of the coefficients of the racial variables in hedonic models may not accurately reflect racial preferences. They also discuss the use of school boundary fixed effects, as in Sandra E. Black (1999), and the effect this has on the coefficients of the racial variables. This chapter provides a brief introduction to some of these issues.

**References**


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**Z Other Special Topics**


The way this book starts out may lead some readers to the impression that the author’s basic argument is relatively straightforward, and somewhat prosaic, if right headed. Markets can provide a very effective structure for governing and organizing economic activity—indeed no other mode of economic organization is as broadly effective. However, for markets to work well, or at all, requires a moral code of behavior on the part of participants that emphasizes and supports truthfulness and playing by the rules, even in circumstances where there are strong individual incentives to cheat. In turn, for this to be the case, the moral structure must also support the development of means of identifying and punishing cheaters. Economies where these moral conditions were established and have held have become prosperous. Economies where this has not been the case have struggled or worse.

That indeed is part of the story Friedman develops. A good portion of this book is oriented around empirical cases that the author analyzes in terms of one or the other side of this argument, the development of a bourgeois moral code that enabled markets to work effectively, or the absence or weakness of these values that caused markets to work in a very unsatisfactory way or prevented the development of markets. However, some of the cases he presents and analyzes are far from common lore. And, as the book develops, the author points to a much wider range of relationships between moral structures and market organization that have shaped the way the world works.

Belief systems can lead to moral structures that see market organization of economic activity to be unfair and harmful. Friedman argues that this was the essence of the socialist belief systems that emerged in the late eighteenth and early nineteenth centuries. While the economic and political structure, and the associated moral code, that developed in the Soviet Union was not what the earlier socialist thinkers had in mind, the genesis of that regime certainly was fostered by an anti-market morality. The cultural revolution in China is another instance of an official moral code leading to attempts to stamp out bourgeois tendencies and incipient markets. As Friedman implicitly argues, for market organization to form and prosper in a society, social norms must favor that.

Moral codes about what is right and wrong can strongly influence what kinds of markets are permitted to develop and how these markets are regulated. The author points to prostitution and various drugs as obvious examples. As is the case in these two instances, a society may be divided on such matters, in which case law may develop which makes the meeting of certain kinds of wants illegal. In some cases this can scotch market activity but, in other cases, drive it underground often with some nasty unintended consequences.
Friedman obviously believes that market organization is a superior way of governing economic activity where it can be used to do so. Like most economists, he recognizes that, for certain activities, the design of market structures must be quite complex if they are to work decently well but, much more than most other economists, he stresses the importance of moral codes as part of the needed governing structures. Thus, in his discussion of the open pool problem associated with fishing and the greenhouse gas emission problem, he argues that the nature and strength of a society's values and norms clearly influences whether market structures can be designed to deal with them. He makes similar observations regarding the design and regulation of markets for finance and health care. The strength of values and norms influences the ability of market governance to work effectively in these and other areas both by influencing what is possible politically and by determining the degree of conformity to the legal rules that are established.

The author also is interested in how different moral codes influence individual, interpersonal, group, and intergroup behavior in their own right, with their influence on markets perhaps only a negligible part of the story. Thus, portions of the book are concerned with criminal behavior as a way of life, moral codes that emphasize vengeance for believed wrongs, and modern terrorism.

The arguments are well and entertainingly presented. The hallmark of the author's exposition is his use of a collection of short empirical case examples. Included in those vignettes are discussions of political and economic organization of cities in ancient Sumeria, medieval fairs in Europe, the troubles of the Hudson Bay company, and culture in nineteenth century Corsica, as well as more contemporary examples like Enron, the economic troubles of the new Russia, the collapse of the cod population, and street gangs. As is to be expected, some of these little presentations are more interesting (and perhaps more accurate) than others. But all are interesting to read, and not surprisingly support the points the author wants to make.

I thus far have described the book without referring to the its title An Evolutionary Account of the Modern World or even using the word "evolution." The opening chapter is indeed a biological and cultural evolutionary account of the emergence of modern humans, which emphasizes how the apparently genetic supported social orientation of human beings was an essential factor enabling the development of language, cumulative culture, and primitive markets. But from then on, while there are various references to some arguments from evolutionary game theory, I did not find the stories or the lessons told by the author to be particularly evolutionary.

Also, I would have thought that an account of the rise of the modern economy would have spent some space on the rise of modern science and how this has enabled and shaped the development of modern technologies. But, aside from a few remarks about how market regimes tend to induce innovation, there is nothing on this. Nothing either on the evolution of the complex structures of nonmarket institutions that make up modern economies and which both support and supplement market organization.

These are observations, not criticisms. This is an interesting and well done book. Its emphasis on the importance of values and norms, moral structures more generally, in shaping what goes on in the world, not just what goes on in markets, is welcome and potentially useful for stretching the minds of some of our colleagues. The book, or chapters from it, would be very good complementary reading for a variety of undergraduate reading courses. And, for us professional economists, it makes a very good read.

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