*Behavioral Economics and its Applications*. Edited by Peter Diamond and Hannu Vartiainen. Princeton University Press, Oxford. 2007. xvi + 312 pp. £27.95.

In recent years, behavioural economics (BE) has moved beyond documenting systematic deviations from the traditional economic model—composed of selfish and unboundedly rational agents with unbounded willpower—and has begun the process of formulating models that capture these deviations, thus allowing a more careful examination of their economic implications. This book attempts to identify specific settings where the application of BE is likely to be valuable. It contains thoughtful discussions of six areas—public economics, development economics, law and economics, wage setting, health economics and the economics of organizations—written by some of the leading researchers in these fields. The book, which has its basis in a 2004 conference, also contains insightful comments—both general and chapter-specific—from a very impressive set of scholars. Most of the chapters are exploratory in nature and contain reviews of important open questions as well as of findings from the BE literature which may prove useful in tackling these questions.

The chapter on public economics is written by Douglas Bernheim and Antonio Rangel. They begin by surveying their work on the possible rift between positive and normative analysis raised by findings in BE, and potential ways of addressing it. This is a fascinating discussion that goes to the heart of the neoclassical approach. How are we to apply the principle of revealed preference when observed choices are context-dependant or when they appear to be 'mistaken'? One intriguing possibility is utilizing neuroscience to identify circumstances under which a neural process necessary for decision making malfunctions. This suggests the possibility of retrieving preferences from choice by *selectively*—yet in a disciplined way—applying the revealed preference principle. Bernheim and Rangel examine three applications: saving, addiction and public goods.

Sendhil Mullainathan points to the potential importance of BE findings for understanding some of the hurdles facing developing countries. In particular, education and saving decisions may be better understood given what we know about bounded willpower.

Christine Jolls discusses behavioural law and economics. She starts by considering the Coase theorem and the challenge posed by the endowment effect, namely that the assignment of entitlements may itself affect valuations. Jolls then surveys evidence on judgment errors important for legal systems, and discusses several interesting applications such as distributive legal rules. She concludes by reviewing the new project (largely due to Jolls and Cass Sunstein) of 'debiasing through law' which, rather than designing laws that take into account given behavioural biases, seeks to *reduce* these biases by carefully changing the legal environment in which individuals operate.

Truman Bewley considers survey and experimental data that may shed light on the process of wage setting, particularly downward wage rigidity. Interviews with managers suggest that resistance to wage cuts comes mainly from upper management. The key reason is that pay cuts damage 'morale', a concept that Bewley explores at some length, distinguishing it from job satisfaction and trying to grapple with its determinants. Interestingly, employers tend to dismiss both Akerlof's (1982) gift exchange model and Shapiro and Stiglitz's (1984) 'no shirking' theory: they see little persistent connection between *increased* pay and morale, and claim not to obtain cooperation by threatening to fire shirkers. Experimental evidence tends to agree with much of what managers say, in particular with respect to perceived fairness and negative reciprocity. Gift exchange experiments do reveal a tendency to reciprocate high wages with high effort, but Bewley suspects that habituation is likely to make this response short-lived.

Richard Frank offers a compelling argument that if there is a field that cries for the application of BE, it is health economics. Both patients and physicians have to make decisions under considerable uncertainty and stress. Evidence suggests that physicians often form their beliefs, and act, based on small samples, local practice, habits and professional norms. At the same time, patients rely heavily on friends and family as well as on their usual, familiar, doctor for information. And as Arrow noted 45 years ago, trust seems to play a central role in doctor–patient relations. These and many other features of the health sector surveyed in this chapter suggest that important progress can be made by introducing behavioural insights to the study of this field.

Finally, Colin Camerer and Ulrike Malmendier consider the economics of organizations. They start by pointing to several possible modifications to the workhorse principal-agent model, suggested by BE findings (e.g. allowing workers to care about the procedure that generates their wages or to evaluate wages using reference points). The equilibrium properties of many of these modifications are yet to be studied. Further complications arise when considering workers in large organizations where processes like group identification and social comparison are likely to be important. This is an area intensely studied by social scientists but which received relatively little attention in BE. The chapter also considers biases in managerial decision making and firms' responses to various consumer/employee/manager biases.

This is a stimulating book, packed with intriguing results, puzzles and ideas for future research. Much of it has the feel of early modern cartography, depicting vast unexplored lands and sparking speculation on the treasures that might be found there. One is left wondering how many explorers will venture into this *terra incognita* and what stories they will tell if and when they come back. As Peter Diamond cautions in his concluding comment, 'the risk, inherent in doing any research, is larger in behavioral economics than in well-developed fields' (p. 303).

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*Post Walrasian Macroeconomics: Beyond the Dynamic Stochastic General Equilibrium Model.* Edited by DAVID COLANDER. Cambridge University Press, Cambridge. 2006. xxi + 416 pp. Paperback £22.99.

This is the second volume of essays on the topic of post-Walrasian macroeconomics published under the direction of David Colander. Both volumes present original papers by authors, many of them well known, who are dissatisfied with Walrasian economics in general and Walrasian macroeconomics in particular. Their aim is to contribute to the evolution of a different type of macroeconomics. The 'post-Walrasian' modifier should thus be taken as meaning that it is time to supersede Walrasian macroeconomics. The reason for such a dismissal is not new—it was expressed by Friedman in his 1949 paper on the demand theory, in which he claimed that Walrasian theory was too abstract, sacrificing real-world relevance to mathematical elegance. This second volume takes stock of the recent evolution of macroeconomics; whereas the target of the first volume was microfoundations, that of the present volume is the dynamic stochastic general equilibrium (DSGE) type of modelling.

Positively, the post-Walrasian approach takes its inspiration from Clower and Leijonhufvud's claim that one should develop Marshallian general equilibrium models focusing on economic processes rather than analysing end-states without knowing how they might be reached. The emphasis is on adaptive rather maximizing behaviour. The types of model that are encouraged are agent-based computational models (i.e. the computational study of economic processes modelled as dynamic systems of interacting agents).

The book comprises five parts, coming after a substantive introduction by Colander. The first, entitled 'Where We Are in Macro and How We Get There', consists of four papers, by Leijonhufvud, Colander, Mehrling and Matthews. The second, 'Edging Away from the DSGE Model', has another four papers, two by Brock and Durlauf, one by Branch and another by Aoki. Part III, 'Leaping Away from the DSGE Model', has three contributions by Tesfatsion, Axtell and LeBaron. Part IV, entitled 'Letting the Data Guide Theory', comprises five papers, by Hoover, Farmer, Bassman, Johansen and a joint paper by Juselius and Johanson. Part V, on policy implications, has papers by Cooper and Howitt.

The overall quality of the papers is high—unusually so, compared with what is usually found in volumes of collected papers. I was particularly interested in the papers by Leijonhufvud, Hoover and Colander on the history of macroeconomics and the contrast between the Marshallian and the Walrasian approaches. All three are brilliant and full of deep insights. In reading Leijonhufvud's paper, I was drawn to the view that he might actually be closer than Lucas than usually believed,