

*The Macroeconomics of Imperfect Competition and Nonclearing Markets: A Dynamic General Equilibrium Approach.* By BÉNASSY (JEAN PASCAL). (Cambridge, Mass. and London: MIT Press, 2002. Pp. xv+272. £23.50 hardback. ISBN 0 262 02528 0.)

Jean-Pascal Bénassy is known as one of the pioneers of the so-called 'disequilibrium' or 'Neo-Keynesian' school of macroeconomics popular in the 1970s. This school's approach was extremely useful in incorporating Keynesian inefficiencies and policy conclusions into macroeconomic models with rigorous microeconomic foundations, but has been the subject of criticism due to its lack of a foundation for price rigidity and price setting. These deficiencies made it impossible to integrate disequilibrium features into standard dynamic general equilibrium models such as those developed by Lucas, Kydland, Prescott, and others. Since the 1980s many economists, including Bénassy himself, have made substantial progress in overcoming the earlier weaknesses and in integrating disequilibrium elements into dynamic macroeconomic models that are fully based on rational expectations and optimising behaviour. This book provides an overview of several of Bénassy's contributions to this field. The book's central message is that non-Walrasian features such as imperfect competition and nominal rigidities make dynamic macroeconomics a lot more interesting and can help to avoid many of the deficiencies of models that restrict themselves to Walrasian equilibrium states only.

The book is divided into six parts, containing a total of 15 chapters. Although most chapters are based on published articles or unpublished working papers, the book itself is not simply a loose collection of articles. Instead it presents a number of original contributions within a single consistent modelling framework. Throughout the book, the notation has been unified, unnecessary repetitions and complications have been avoided, and important supplementary material has been added. The introduction and conclusions of each chapter link the chapter to the rest of the book in a coherent manner. These features and Bénassy's concise and elegant style of writing make the reading of this book a particularly pleasant experience. Moreover, it is easily possible to read each of the book's parts independently.

The first three chapters are devoted to a discussion of the early disequilibrium literature of the 1970s with an extension to rational price setting under objective demand in chapter 3. One of the book's most important messages is clarified within a simple model in chapter 2, namely that imperfect competition without nominal rigidity leads to Keynesian inefficiencies but to Walrasian policy conclusions. Chapters 4–8 discuss dynamic macroeconomic models with imperfect competition and without nominal rigidities. The policy ineffectiveness results of chapters 4 and 6 are perhaps not too surprising, but having them presented in such neat and clever models will be appreciated by any reader. Chapter 7 is particularly interesting as it shows how capital-labour complementarities combined with imperfect competition can lead to asymmetric and persistent output dynamics, even when the underlying technology shocks are not at all persistent.

Chapters 9–11 introduce nominal rigidities, mostly in the form of preset wages that cannot adjust to later demand or supply shocks. In chapter 9 wages are preset for one period, and it is shown analytically how monetary policy shocks induce output responses with counter-cyclical real wages and pro-cyclical prices, helping to avoid weaknesses in the corresponding Walrasian economy. By turning to staggered wage contracts, chapter 10 shows, again analytically, how the output response to monetary policy shocks becomes hump-shaped and considerably more persistent. One of the major values of these chapters, not just from a didactic point of view, is that the models are explicitly solved so that propagation mechanisms become analytically transparent and correlation coefficients can be explicitly computed. By doing so, Bénassy is able to avoid numerical calibration exercises to explore the role of parameters.

The final four chapters turn to policy issues in models with nominal rigidities. These chapters come to the Keynesian policy conclusion that optimal fiscal policy should react counter-cyclically to demand shocks, and this is even the case when the government has no more information than private agents. This surprising result stands in sharp contrast to the well-known conclusions by Sargent and Wallace who showed that fiscal policy is powerless under such circumstances. In the opinion of this reviewer, the decisive feature for these divergent results is the failure of Ricardian equivalence in the overlapping-generations economy employed by Bénassy. In Bénassy's model, the government can respond to a detrimental demand shock today with a tax cut *in the future* (which is feasible even without any informational advantage), thereby increasing the consumers' present net wealth and inducing them to spend more today. Of course, this argument breaks down when Ricardian equivalence holds so that the government cannot alter the net wealth position of the private sector. Although the failure of Ricardian equivalence is mentioned briefly, a more elaborate discussion would have been useful for the reader.

Overall, this is a brilliant textbook on modern macroeconomic theory. It is not only highly recommended for any researcher interested in dynamic macroeconomics, but should also serve as a standard reference for graduate courses in macroeconomics.

LEO KAAS

*University of Vienna*