Book Review

Equilibrium in Economics: Scope and Limits

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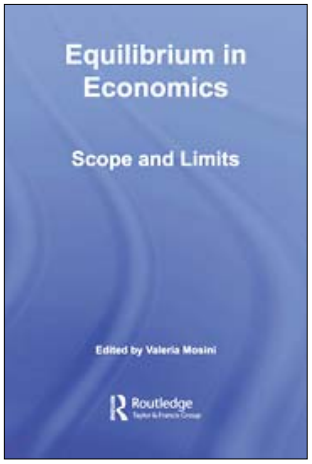

The notion of equilibrium plays a fundamental role in economic science. Yet, scholars often adopt or refer to it uncritically. This situation led to the flourishing of an ample debate in contemporary economics about the value of models based on the concept of equilibrium. The book under review offers an in-depth analysis of this notion by investigating some important questions: How did the notion of equilibrium enter into economics? Which meaning(s) has it been used with? What kind of (past, present, and, possibly, future) role does and can it play in this field?

The volume consists of a collection of papers by authors coming from different academic backgrounds (economists, mainly, but also historians, sociologists and philosophers), who thereby address the issue from different points of view. The work is divided into three parts. The first two of them, 'The interplay of equilibrium notions between the natural sciences and economics' and 'Equilibrium in pre-neoclassical economics', have an historical orientation. They investigate, respectively, the emergence of both theoretical and methodological interchanges between economics and natural sciences and the issue of how the notion of equilibrium have been used and characterized by some of the founders of economics. The last and richest part, 'Equilibrium in present-day economic theory and practice', examines the use of the notion of equilibrium in present economic theory and practice. In what follows, I shall discuss each of these parts in more detail.

The three papers in the first part address the issue of the influence of other scientific fields in the development of the notion of equilibrium in economics. The paper by Grattan-Guinness deals with the theoretical interchanges between mechanics and economics. More specifically, it analyses how the notions of equilibrium, defined in mechanics, have influenced the work of some of the fathers of marginalism, like Jevons, Walras and Pareto. The paper shows how economics inherited many different notions of equilibrium from mechanics and how disproportionate the influence of such notions has been, given the very different scientific nature of disciplines such economics, on the one hand, and mechanics/physics, on the other hand. The second paper, by Bensaude-Vincent and Mosini, focuses on the theoretical interplay between chemistry and economics and analyses the two main notions of equilibrium developed in chemistry by Lavoisier (a static notion) and Le Chatelier (a dynamic notion) , respectively. First, the authors stress that Lavoisier held that the same notions of balance mechanisms and equilibrium were generally at play in nature, and hence present both in chemistry and in economics. Secondly, they analyze how the notion of equilibrium developed by Le Chatelier has been translated into economy by Samuelson – an example of a haphazard use of analogy between two radically different disciplines. The third paper, by Jarvis and Mosini, looks at the interchanges between biology and economy. It analyses, on the one hand, the notion of equilibrium as homeostasis and, on the other hand, a theoretical economic-

derived notion of equilibrium associated with evolutionism and connected to cost-benefit analyses. To summarize, this first part is centered on the theoretical 'exchanges' between economics and other disciplines. We are faced with a rich interplay, which shows how the multifarious has been the notion of equilibrium introduced, since the beginning, in economics. All these three papers raise interesting questions about the value and the correct use of analogy between different fields.

The second part, also constituted by three papers, deepens the analysis of how equilibrium-connected notions have been treated by pre-neoclassical economists. The first paper, by Dixon and Wilson, shows that the selfish, Hobbesian, neoclassical economic agent cannot be equated to the Smithian economic agent. Indeed, Smith's notion of 'simpathy', together with Chalmers' notion of 'character', and with the more recent work of Mead, suggests a notion of economic agency that denies the neoclassical reduction of human agency to 'particle-like behaviour'. The second paper, by van den Berg, dedicated to Isnard's work, shows how the tendency towards an utility-maximization approach was already mitigated, in the thought of this eighteen-century author, by the appeal to dimensions of human agency other than pure egoism, through the emphasis placed on the role of morality and 'virtuous habits' in the characterization of rational behavior. Finally, the paper by Vatin revises the work of Cournot, stressing the fundamental influence of Liebniz's thought over his ideas.

The third and last part, composed by seven papers, is devoted to the analysis of the role of the notion of equilibrium in contemporary economic theory. A big portion of these papers is dedicated to highlighting the ambiguities associated with the notion of equilibrium in economics and to proposing possible paths of disambiguation in order to restore clarity in the discussion about equilibrium. The papers by Lawson, by Samuels and by Chick are clear examples. Lawson starts by analyzing the ambiguous role of the notion of equilibrium in economic theorizing. He distinguishes two possible approaches towards equilibrium, according to which such concept refers, respectively, to a real property of the economic systems (the 'ontic' approach), or simply to a useful tool in the investigation of such systems (the 'epistemic' approach). Lawson believes that much of the confusion in the debate about equilibrium stems from conflating this distinction and confounding 'claims about models and their properties with properties of the reality that the models putatively aim to represent'.

In their papers, Samuels and Chick try to disentangle the various aspects of the notion of equilibrium that are mixed in contemporary economics. Samuels highlights various dichotomies, which different characterizations of equilibrium move from, focusing on the approach adopted towards equilibrium (seen either as an element of reality or as a useful modeling tool) or on its role in argumentative structures. Chick proposes a classification of the many different notions of equilibrium at play in economical theorizing and argues that the equilibrium-controversy should be reconsidered with respect to a better defined notion of equilibrium.

Backhouse starts from a strong instrumentalist point of view about equilibrium: economics is first of all a matter of problem-solving, and the debate about the role of equilibrium has to be treated case by case. The question whether the notion of equilibrium is useful or not depends primarily on its role within models that successfully target particular problems.

The paper by Thomas discusses how econometrics deals with the concept of equilibrium, concluding that this specific field can elaborate interesting economic models that do not employ such a notion.

Freeman points to the multifarious use of the concept of equilibrium in economics, which contrasts with the use of such concept in the natural sciences. Freeman also suggests that, in the former field, the concept of equilibrium is used in a dogmatic, quite religious, way.

Finally, starting from a representative instantiation of the concept of equilibrium in neoclassical economics, i.e., the notion proposed by Lucas, Denis examines the central role that equilibrium gained in the neoclassical approach and argues that this led to overestimating the static analysis of the system at the expense of its dynamic analysis. Denis concludes by stressing the need for the future recovery of a dialectical approach to the study of the economic system.

This book presents varied and rich contributions, which look at the notion of equilibrium from very different points of views, moving from an historical to an epistemological approach. Surely, this collection achieves at least one result: it convinces the reader that the debate about equilibrium in economics needs to be re-assessed from its foundations. Equilibrium is a concept that has been introduced in economics under the urge of various and different external leverages. Such manifold characterization keeps vitiating the current usage of the notion. In order to address properly the question about the role of equilibrium in economics, we need therefore to address the preliminary question about the meaning of the notion of equilibrium itself. The definition and classification of the various notions at play, of their epistemological and functional role in theoretical economics, is the first step for a good grasp of the issue.

At the same time, the richness and variety of the contributions appear also as the main drawback of the book. Despite an evident effort of coordinating and integrating the papers, the presence of so many different perspectives makes it difficult for the reader to gain a consistent overview on the issue and to selecting a research route appropriate for facing the many unlocked problems.

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