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Walras's Market Models describes and evaluates Léon Walras's models of competitive markets. The book differs from previous examinations of his work by identifying his career phases and the associated general equilibrium models, which are shown to be very different in character.

During his mature phase of theoretical activity, Walras was concerned with a competitive economy that passes through a stage of disequilibrium in the production and sales of commodities. His work on this topic was rich with theoretical innovations and provided realistic insights into economic behavior. In his last phase of theoretical activity, he tried to construct a model in which there is no hiring, production, sales, consuming, or saving in disequilibrium. The defective structure of that model and its fragmentary nature prevented it from becoming a functioning system.

Until now, the models of the two phases of Walras's theoretical work have not been subjected to an accurate analysis and evaluation. *Walras's Market Models* fills this gap.

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Indiana University of Pennsylvania



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CAMBRIDGE UNIVERSITY PRESS
Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore, São Paulo

Cambridge University Press
The Edinburgh Building, Cambridge CB2 2RU, UK

Published in the United States of America by Cambridge University Press, New York

www.cambridge.org
Information on this title: www.cambridge.org/9780521562683

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First published 1996
This digitally printed first paperback version 2005

A catalogue record for this publication is available from the British Library

Library of Congress Cataloguing in Publication data

Walker, Donald A. (Donald Anthony), 1934–
Walras's market models / Donald A. Walker.

p. cm.

Includes bibliographical references and index.

ISBN 0-521-56268-6

1. Commodity exchanges – Mathematical models. 2. Commercial
products – Mathematical models. 3. Equilibrium (Economics) –
Mathematical models. 4. Walras, Léon, 1834–1910. I. Title.
HG6046.W28 1996
332.63'28–dc20 96-12024
CIP

ISBN-13 978-0-521-56268-3 hardback
ISBN-10 0-521-56268-6 hardback

ISBN-13 978-0-521-02295-8 paperback
ISBN-10 0-521-02295-9 paperback

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To Patricia and Valerie

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Preface

This is a new book and not simply a collection of essays. Although based on some essays, it differs from them in various ways. I have changed all of them to some degree, and I have extensively rewritten many of them so as to present the material as effectively as possible and to reflect the limited number of ways in which my views have changed since the essays were written. Moreover, I have devised titles of parts, sections, and chapters that are intended to guide the reader through the complexities of the subject matter, and I have organized the material in a way that displays clearly the phases and sequence of Léon Walras's modeling of markets. In most cases, the chapters have titles that differ from those of the essays. I have eliminated most of the repetitions that are to be found in the essays, but I found that preserving some of the repetitions is desirable.

In a general way, the book accomplishes three major tasks. First, by emphasizing the concept of models in relation to Walras's work, it becomes possible to identify many of his constructions that have until now been passed over as comments on the real economy or as brief speculations about economic relationships, or that have escaped notice altogether. The word "model" rather than "theory" will ordinarily be used in reference to Walras's work because in many instances he defined special situations not found in reality and created a variety of different hypothetical constructions relating to the same general subject matter. Second, the book reveals in broad outlines and great detail that Walras had a mature phase of theoretical activity followed by a phase of decline of his analytical powers. Recognition of this circumstance is enormously liberating and energizing for the historian of Walrasian economic thought. Everything falls into place. It becomes clear that Walras put the models of his mature phase and the models of his last phase, despite their incompatibility, into the same edition of the *Eléments d'économie politique pure*. It then becomes clear, for example, why it has been possible to have such divergent interpretations of his work on tatonnement, and how scrutiny of one and the same text – the 1926 edition of the *Eléments d'économie politique pure* – can lead one scholar to argue that Walras was interested in the dynamics of market processes and another to argue that he was exclusively interested in statics. The reader will see that

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students of Walras's work have been laboring in the dark because they have tried to understand it on the basis of their scrutiny of the fourth and fifth editions of his *Éléments d'économie politique pure*. They have not been furnished with the information that would enable them to have a true understanding of what is on the page in front of them. The plight of readers of William Jaffé's translation of the fifth edition is even worse, because in addition to presenting the admixture of conflicting models, it does not correctly convey Walras's meaning in a number of respects that are crucially important for an understanding of his entire body of work.

Third, the book analyzes and evaluates Walras's models. There is no point in studying the history of economic thought, except as an antiquarian pursuit, unless lessons can be learned from it. That entails revealing its structure and implications, knowing whether or not it is nonsense, showing its insights and suggestive ideas – in short, indicating why some of it is worth studying and why some of it does not merit much attention. Accordingly, this book reveals the character of the models that Walras constructed during his mature phase, showing that he made his finest contributions during that phase and that he produced inferior work during his last phase. Unfortunately, the latter was used as the basis of modern general-equilibrium theory. Scholars have unwittingly filled in some of the blanks in Walras's last comprehensive model, have supposed that his equations make sense in relation to it, and have imputed their own beliefs about the workings of competitive markets to it. For example, Walras's written pledges model was regarded by Oskar Lange, Don Patinkin, Michio Morishima, and other writers as being the true expression of Walras's thought on *tatonnement*, so they neglected his earlier writings. Jaffé represented them only as constructions that Walras discarded on the way to the definitive formulation that Jaffé considered the written pledges model to be, or believed that those earlier writings should be interpreted as having the same intent as the written pledges model but as being imperfect expressions of its characteristics. An appreciation of the fact that Walras had a mature phase of theoretical activity followed by a phase of decline provides a corrective to that situation. The student of his work is able to approach the material that he introduced in his last phase without the supposition that it presents his best thoughts.

This is not a work of polemics, controversion, or argumentation with the opinions of other interpreters of Walras, with a few exceptions. I have examined the views of some economists with whom Walras had disagreements and the opinions of some modern economists on his model of *tatonnement*. I have on occasion discussed Jaffé's writings because of the prominent position that has been accorded them and because I wrote many of my articles on Walras during a period in which Jaffé was the only author who had expressed an opinion on some of the subjects covered. I have not drawn

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on or built on Jaffé's analyses to achieve my own, and my references in this book to his work are mainly critical. I therefore point out that I have not been remiss in giving attention to his contributions. I translated the articles he wrote in French and published them and all his other articles on Walras, with an extensive introduction, in a collected edition (Jaffé 1983). I wrote his obituary (Walker 1981a), an appreciation of his work (Walker 1981b), and an article on his career and beliefs (Walker 1983), and put together, edited, completed, in large part translated, and published his notes for the first chapter of a projected biography of Walras (Jaffé 1984). I now state again that the economics profession owes a great deal to Jaffé's lifelong study of the writings of Walras and, despite its defects, to his translation of Walras's major book. He brought Walras to the attention of English-speaking economists and explained much about his ideas for the first time in English. Moreover, Jaffé's edition of Walras's correspondence and related papers (Walras 1965) is a monumental contribution to Walrasian scholarship. It provides source materials for an understanding of the development of neo-classical economics, and has been of great value to me in writing this book.

In most respects I have had no reason to mention other students of Walras's writings. The chapters on his mature models are concerned with a phase of his work that has not even been identified by other modern writers, and my analysis and evaluation of his last phase of theoretical activity is also original. I see the book as a novel presentation of Walras's work, breaking new ground in the understanding of his writings and in the identification of his contributions, and the work of other interpreters has therefore not been relevant for my concerns. I could have drawn extensive contrasts between my views and the received interpretation of Walras's writings – for example, by pointing out in many detailed respects how other writers have misunderstood the last edition of the *Eléments d'économie politique pure* or by emphasizing that they have not even recognized many of the models and aspects of Walras's work that have interested me. That would not have been productive because I and the expositors of the traditional interpretations have perceived different subject matters.

I am grateful to Indiana University of Pennsylvania for Senate research grants that helped to support my efforts in writing the essays on which this book is based and in preparing the book itself, to Debbie Mahan and Mary-Anne Lupinetti for their secretarial efforts, and to Ronald Cohen for his editorial work on the book.

Acknowledgments

This book is based on nineteen of my essays on Léon Walras's work. The publisher and I wish to thank the publishers of the essays for permission to republish them with or without changes here.

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