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0521022843 - Cournot Oligopoly: Characterization and Applications

Edited by Andrew F. Daughety

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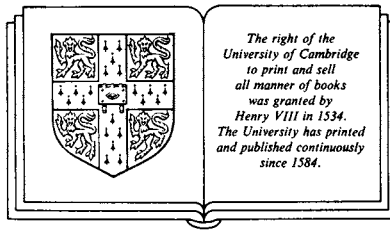
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Edited by
Andrew F. Daughety
UNIVERSITY OF IOWA



Cambridge University Press
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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/9780521361767

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First published 1988
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

Cournot oligopoly.

Bibliography: p.

1. Oligopolies. 2. Cournot, A. A. (Antoine Augustin),
1801–1877 – Contributions in economics. I. Daughety,
Andrew F.

HD2757.3.C68 1988 338.8'2 88–7261

ISBN-13 978-0-521-36176-7 hardback
ISBN-10 0-521-36176-1 hardback

ISBN-13 978-0-521-02284-2 paperback
ISBN-10 0-521-02284-3 paperback

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Preface

Fifty years ago, in an address to the Cournot Memorial session of the Econometric society, A. J. Nichol observed that if ever there was an apt illustration of Carnegie's dictum that "It does not pay to pioneer," then Cournot's life and work would be it. His work was essentially ignored (especially by his countrymen) for many years. What survives in most economists' minds today is Cournot's model of duopoly. And this, too, if one consults the treatment in most current microeconomics texts, seems to linger on as an image of the past, a traditional topic for inclusion in a chapter on imperfect competition, sandwiched somewhere between monopoly and the bibliography, or neatly tucked away as an example of an application of game theory. So why dust off this musty topic now?

A peek at the extended bibliography and the papers in this volume should make the reason for reconsidering Cournot clear: There has been a veritable explosion of Cournot-based models of strategic behavior over the last two decades, and the end is not in sight. In recognition of this, this volume is a celebration of the publication of Augustin Cournot's model of noncooperative behavior and an examination of its relevance and importance to economic theory and analysis 150 years after its first appearance. The introduction examines the Cournot model and its relationship to many of the classical and recent analyses of market behavior. A few special papers of older vintage are included (Cournot's chapter on oligopoly, a translation of Bertrand's review, and Nash's generalization of the Cournot solution) but the book consists mainly of recently published papers that either examine the Cournot model itself or apply it to provide a deeper understanding of economic theory and behavior. Eight papers concerned with existence, the versatility of noncooperative models of behavior, the rationality and reasonableness of such behavior, and the variety and interrelatedness of modeling options are collected in a section entitled "Applications." Eight other papers focus on applications, using Cournot's model to analyze theoretical models of perfect and imperfect competition and observed structure and behavior in firms and markets. These sixteen papers are a sample of recent work in economic theory and

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analysis, reflecting a revival of interest in Cournot's model largely due to increased emphasis on aspects of imperfect competition and strategic behavior in various economic models. All papers were faithfully reproduced, which means that typos in the papers were also left intact as long as they did not cause serious misunderstanding of the material; those that might were corrected. The introduction, part overviews, and the extended bibliography of over 300 references provide links to the existing literature on oligopolistic behavior.

Not surprisingly, there are a number of people to thank. This book grew out of a conversation with Xavier Vives. Also, this volume would be very short without the papers that have been reprinted; I thank the publishers and the authors for permission to include their works in this volume. Jim Friedman and Mort Kamien provided a wealth of historical observations and insights; with Jennifer Reinganum they also provided productive comments on various versions of the introductory chapter. Support by the National Science Foundation via two grants (SES-8218684 and IST-8610360) and by the Department of Decision Sciences of The Wharton School, University of Pennsylvania, where this project originated while I was a visitor there, is also gratefully acknowledged. Mark Knez of Wharton and Suresh Mutuswami of Iowa provided diligent help on the extended bibliography. I want especially to thank Colin Day, formerly of Cambridge University Press, now with The University of Michigan Press, who shepherded this book from concept to contract to production schedule. Last, but most important, I want to thank my wife, Ginny, and our children, Sam and Kassie, who gave constant support and encouragement and put up with untold numbers of nights and weekends given over to a word processor.