

Cambridge University Press

978-0-521-29702-8 - The Economics of Individual and Population Aging

Robert L. Clark and Joseph J. Spengler

Frontmatter

[More information](#)

---

CAMBRIDGE SURVEYS OF ECONOMIC LITERATURE

THE ECONOMICS OF INDIVIDUAL  
AND POPULATION AGING

Cambridge University Press

978-0-521-29702-8 - The Economics of Individual and Population Aging

Robert L. Clark and Joseph J. Spengler

Frontmatter

[More information](#)

## CAMBRIDGE SURVEYS OF ECONOMIC LITERATURE

### *Editors:*

Miss Phyllis Deane, University of Cambridge

Professor Mark Perlman, University of Pittsburgh

### *Editorial Advisory Board:*

Professor A. B. Atkinson, University College, London

Professor M. Bronfenbrenner, Duke University

Professor K. D. George, University College, Cardiff

Professor C. P. Kindleberger, Massachusetts Institute of Technology

Professor T. Mayer, University of California, Davis

Professor A. R. Prest, London School of Economics and Political Science

The literature of economics is expanding rapidly, and many subjects have changed out of recognition within the space of a few years. Perceiving the state of knowledge in fast developing subjects is difficult for students and time-consuming for professional economists. This series of books is intended to help with this problem. Each book will be quite brief, giving a clear structure to and balanced overview of the topic and written at a level intelligible to the senior undergraduate. The books will therefore be useful for teaching, but will also provide a mature yet compact presentation of the subject for the economist wishing to update his knowledge outside his own specialism.

### *First books in the series*

*E. Roy Weintraub:* Microfoundations: The compatibility of microeconomics and macroeconomics

*Dennis C. Mueller:* Public choice

*Robert L. Clark and Joseph J. Spengler:* The economics of individual and population aging

Cambridge University Press

978-0-521-29702-8 - The Economics of Individual and Population Aging

Robert L. Clark and Joseph J. Spengler

Frontmatter

[More information](#)

---

# **The economics of individual and population aging**

---

**ROBERT L. CLARK**

*Associate Professor of Economics, North Carolina State University*

**JOSEPH J. SPENGLER**

*Professor of Economics, Duke University*

**CAMBRIDGE UNIVERSITY PRESS**

**CAMBRIDGE**

**LONDON NEW YORK NEW ROCHELLE**

**MELBOURNE SYDNEY**

Cambridge University Press

978-0-521-29702-8 - The Economics of Individual and Population Aging

Robert L. Clark and Joseph J. Spengler

Frontmatter

[More information](#)

CAMBRIDGE UNIVERSITY PRESS

Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore, São Paulo, Delhi

Cambridge University Press

The Edinburgh Building, Cambridge CB2 8RU, UK

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

[www.cambridge.org](http://www.cambridge.org)

Information on this title: [www.cambridge.org/9780521228831](http://www.cambridge.org/9780521228831)

© Cambridge University Press 1980

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 1980

Re-issued in this digitally printed version 2008

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

*Library of Congress Cataloguing in Publication data*

Clark, Robert Louis, 1949–

The economics of individual and population aging.

(Cambridge surveys of economic literature)

Bibliography: p.

Includes index.

1. Old age – Economic aspects. 2. Aging – Economic aspects. 3. Retirement – Economic aspects. 4. Aged – Economic conditions. 5. Old age assistance. I. Spengler, Joseph John, 1902–, joint author. II. Title.  
HQ1061.C52 301.43'5 79–19495

ISBN 978-0-521-22883-1 hardback

ISBN 978-0-521-29702-8 paperback

Cambridge University Press  
978-0-521-29702-8 - The Economics of Individual and Population Aging  
Robert L. Clark and Joseph J. Spengler  
Frontmatter  
[More information](#)

CONTENTS

<i>Preface</i>	vii
1 Recognition of the economics of aging	1
2 Population aging: sources	10
<i>Indicators of population aging</i>	10
<i>Gross reproduction and age composition</i>	11
<i>Life expectancy and age composition</i>	13
<i>Immigration and age composition</i>	15
<i>Pre-1950 trends in population aging</i>	15
<i>Limits to aging trend</i>	18
<i>Current prospect</i>	23
3 Population aging and dependency	28
<i>Recognition of population aging prior to 1950</i>	30
<i>Increases in the cost of support programs for the elderly</i>	33
<i>Age structure changes and the responsiveness of the labor force</i>	40
4 Economic status of the elderly	48
<i>Income of the aged</i>	48
<i>Income sources and their importance</i>	54
<i>Replacement rates by income sources</i>	55
<i>Inflation and the income of the aged</i>	61
<i>Further population aging and economic status of the elderly</i>	63
5 Age and economic activities: life-cycle patterns	67
<i>Economic stages of human development</i>	67
<i>Age, productivity, work capacity, and job performance</i>	74
	v

Cambridge University Press  
978-0-521-29702-8 - The Economics of Individual and Population Aging  
Robert L. Clark and Joseph J. Spengler  
Frontmatter  
[More information](#)

<i>Contents</i>	vi
<i>Age earnings profiles: saving</i>	77
<i>Consumption and saving</i>	79
<i>Life-cycle models</i>	80
6 Labor supply of the elderly	85
<i>Applying labor supply models to older workers</i>	85
<i>Labor supply, retirement, and inconsistencies in the literature</i>	86
<i>Data sources</i>	89
<i>Factors influencing the labor supply of the elderly</i>	89
<i>Pension-related incentives</i>	91
7 Personal and market characteristics affecting retirement	105
<i>Health</i>	105
<i>Economy characteristics</i>	109
<i>Other financial variables</i>	113
<i>Family and individual characteristics</i>	117
<i>A summing up</i>	118
8 Pensions and the economy	120
<i>Social security</i>	121
<i>Private pensions</i>	136
<i>Problems</i>	139
9 Macroeconomic response to age-structural change	142
<i>Age and productivity</i>	145
<i>Age and mobility</i>	147
<i>Age and consumption</i>	150
<i>Aging and saving</i>	152
<i>Aging and investment</i>	154
<i>Population aging and support of retirees</i>	155
10 Conclusion	156
<i>Notes</i>	164
<i>Bibliography</i>	170
<i>Index</i>	209

Cambridge University Press

978-0-521-29702-8 - The Economics of Individual and Population Aging

Robert L. Clark and Joseph J. Spengler

Frontmatter

[More information](#)

## PREFACE

This study summarizes and assimilates research by international scholars in economics, demography, and the other social sciences in order to provide a conceptual framework for the economics of aging. The objective of this analysis is to identify and describe the principal economic issues associated with individual and population aging and to assess the existing knowledge respecting the economic and social problems emerging with aging. The integration of interdisciplinary research is of special importance in any examination of gerontological issues, and we have been sensitive to this mandate. However, our primary focus has been on economic complexities of individual life-cycle allocation decisions and the macroeconomic problems that arise from age-structure changes.

The review is international in scope, as we trace the development of concern for population aging in Europe, the United States, and other industrialized countries. Theoretical concepts and changing demographic conditions are illustrated with data from various countries. Cross-national econometric studies are reported along with time-series and cross-sectional research on individual countries. National differences in the response to aging, the institutions that provide income maintenance to the elderly, and the economic conditions of the elderly are noted. In some cases, a single country is examined in detail to indicate a particular aspect of the economics of aging. Most frequently, the United States is chosen because of the availability of data, the greater number of empirical studies employing U.S. data, the familiarity of the

Cambridge University Press

978-0-521-29702-8 - The Economics of Individual and Population Aging

Robert L. Clark and Joseph J. Spengler

Frontmatter

[More information](#)

*Preface*

viii

authors with U.S. institutions, and the essential universality of aging phenomena.

Throughout the manuscript, we have attempted to assess the current state of the literature bearing on economic concepts relating to aging phenomena and to indicate fruitful avenues for further research. It is our hope that scholars interested in economics or gerontology can productively utilize this text to identify important problems, become acquainted with previous research on these questions, and generate ideas for future study.

Many colleagues at Duke University and North Carolina State University have contributed to the improvement of this manuscript. We owe a special debt of gratitude to Juanita Kreps, who has worked with us on related projects and whose thinking is reflected in many sections of the book. George Maddox and George Brosseau have been instrumental in formative stages of our research on the economics of aging and have been helpful in the integration of interdisciplinary findings into the volume. Some of the material included in the volume was previously published in a condensed version in the *Journal of Economic Literature*.

Robert L. Clark  
*Raleigh, North Carolina*

Joseph J. Spengler  
*Durham, North Carolina*

November, 1979