CHINESE PUBLIC PENSIONS ANALYZED
BY OLG MODELS

ZAIGUI YANG
China Institute for Actuarial Science,
Central University of Finance and Economics
Beijing, China
CONTENTS

Preface vii
Acknowledgments xi

I. Urban Pension, Exogenous Model, Contribution Rate 1
Chapter 1 Basic OLG Model for Urban Public Pension 3
Chapter 2 Lifetime Uncertainty and Urban Pension Contribution Rates 19
Chapter 3 Altruistic Motives, Life Expectancy and Urban Public Pension 31

II. Urban Pension, Endogenous Growth Model 43
Chapter 4 Urban Public Pension, Human Capital and Endogenous Growth 45
Chapter 5 Urban Public Pension, Exogenous Fertility and Endogenous Growth 57
Chapter 6 Urban Public Pension, Endogenous Fertility and Economic Growth 67

III. Urban Pension, Exogenous Model, Replacement Rate 79
Chapter 7 Optimal Replacement Rate of Urban Pension under Population Aging 81
Chapter 8 Altruistic Motives, Life Expectancy and Urban Pension Replacement Rates 95

IV. Rural Pension, Exogenous Model 109
Chapter 9 Basic OLG Model for Rural Public Pension 111
Chapter 10 Gift Motive and Rural Public Pension 127

V. Rural Pension, Endogenous Growth Model 139
Chapter 11 Rural Public Pension, Human Capital and Endogenous Growth 141
Chapter 12 Rural Public Pension, Uncertain Lifetime and Endogenous Growth 155
## Contents

**VI. Extensive Discussions on Public Pension in China**  
167  
**Chapter 13** Urban Public Pension with Capital Taxation  
169  
**Chapter 14** Urban Public Pension, VAT and Endogenous Growth  
179  
**Chapter 15** Fertility Linked Pension Systems and Endogenous Growth  
191  
**References**  
205  
**Index**  
209