Aging Population, Pension Funds, and Financial Markets

Regional Perspectives and Global Challenges for Central, Eastern, and Southern Europe

Robert Holzmann, Editor
## Contents

*Preface*  
*Acknowledgments*  
*Abbreviations and Acronyms*

<table>
<thead>
<tr>
<th>Chapter 1</th>
<th>Introduction, Main Messages, and Policy Conclusions</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robert Holzmann</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structure of the Book</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Overview and Key Messages</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Policy Conclusions and Future Priorities</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Note</td>
<td>11</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter 2</th>
<th>Were Financial Systems in CESE Countries Prepared for the Challenges of Multipillar Pension Reform?</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robert Holzmann, Csaba Feher, and Hermann von Gersdorff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multipillar Reforms in Transition Economies</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Financial Sector Readiness in the Region</td>
<td>23</td>
<td></td>
</tr>
</tbody>
</table>
Current Status of the Financial Sector 29
Conclusions 37
Notes 38
References 38

Chapter 3 How Can Financial Markets Be Developed to Better Support Funded Systems? 41
Ricardo N. Bebczuk and Alberto R. Musalem

Is Too Much Money Chasing Too Few Assets? 41
Bank-Based and Market-Based Systems 51
Alternative Investment Options in Emerging Countries 55
Conclusions 57
Notes 58
References 60

Chapter 4 Population Aging and the Payout of Benefits 63
Heinz Rudolph and Roberto Rocha

Lessons for Developing Annuity Markets 64
Preparing for the Payout of Benefits: Challenges and Options 73
Conclusions 79
Notes 80
References 80

Chapter 5 Can the Financial Markets Generate Sustained Returns on a Large Scale? 83
Ricardo N. Bebczuk and Alberto R. Musalem

Gross Financial Returns and Pension Fund Asset Allocation 84
Net Pension Fund Returns 89
Conclusions 91
Notes 92
References 94

Chapter 6 Does Investing in Emerging Markets Help? 97
Ricardo N. Bebczuk and Alberto R. Musalem

International Financial Diversification and Domestic Bias 97
Return, Risk, and International Diversification 102
Investing in Emerging Markets 105
Conclusions 112
Notes 113
References 115

Chapter 7 Will Population Aging Affect Rates of Return? 119
Robert Holzmann

Demographic Developments and Motivation 120
Will Aging Cause a Financial Market Meltdown? 123
The Impact of Aging on the Implicit Returns of
Unfunded Pension Schemes 130
Conclusions 134
Notes 135
References 135

Appendix Readiness Indicators 139

Conceptual Considerations 139
Ten Critical Areas of Readiness Assessment 149
Applied Methodology for Rating 155
References 156

Index 157

Figures

2.1 Readiness Indicator Scores at Reform and Five
Years Later, Five CESE Countries 26
2.2 Stock Market Capitalization as Percent of
GDP, Five CESE Countries, 2000 and 2006 27
2.3 Stock Trading Volume as Percent of Market
Capitalization, Five CESE Countries, 2000 and 2006 28
2.4 Readiness Indicator Scores, Four CESE Countries
with Voluntary Pension Schemes 29
3.1 Financial Structure, Chile, 1981–2007 54
4.1 Bank Assets and Per Capita Income, 50 Countries, 2005 66
4.2 Nonbank Financial Institution (NBFI) Assets and Per
Capita Income, 50 Countries, 2005 67
4.3 Total Assets and Per Capita Income, 50 Countries, 2005 67
4.4 Ratio of Life Insurance Assets to Pension Assets, Chile,
1991–2005 71