become or remain a specialist in both the theory and practice of pension reform around the world.

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Optimizing the Aging, Retirement and Pensions Dilemma. Marida Bertocchi, Sandra L. Schwartz, and William T. Ziemba, Wiley, 2010, ISBN 978-0-470-37734-5, 411 pages. doi:10.1017/S1474747211000412

This is a three-part volume on broad issues in retirement, savings and pensions. The first part deals with general issues in the economics and financial economics of pensions and retirement, the second is a collection of academic essays on a diverse range of retirement-related topics, and the third presents some applications of discrete-time stochastic dynamic programming to corporate and individual pension decisions. The approach of the volume varies greatly from chapter to chapter, and it is therefore difficult to decide who the target audience is meant to be. The book is likely to be most useful to practitioners who have an interest using stochastic programming to determine pension fund and individual asset allocation. For these readers, though, other parts of the book will be of little interest. In my view the authors may have erred by trying to make the scope of the volume too broad. It would have been better to focus more narrowly on stochastic programming applied to long-run investment policy inside and outside pension funds. As a summary of the overall issue of the economics and finances of retirement and pensions it is not a great success, and those looking for a general and accessible treatment of these issues should in my view look elsewhere.

The best parts of the book are the second and third sections. Individual chapters in the second section include an excellent summary of the academic literature on the relationship between population ageing and asset returns (Marianna Brunetti and Costanza Torricelli), a chapter on whether DB pension plans should be final salary or career average (Charles Sutcliffe) and a summary of recent developments in the market for mortality-linked securities (David Blake and Enrico Biffis). Other chapters in this section deal with stochastic programming and continuous-time portfolio theory applied to corporate pension funds, sovereign wealth funds and asset–liability management for retirement. Each of these chapters is likely to be useful both to academics and practitioners looking for an accessible insight into the academic literature and recent developments on these topics.

The third part of the book builds on some of the chapters in the second section by looking at various discrete-time asset–liability modelling frameworks that have been applied to corporate pensions, including the Siemens Pension Fund in Austria. The model is highly flexible, and allows pension funds to determine an optimal asset allocation strategy, and to assess the effect of various policy choices, under different economic conditions, goals, constraints and liability profiles. Two final chapters apply a stochastic dynamic programming model to a lifetime consumption and investment problem. The model is designed with a heavy focus on the practical aspects of asset markets, which increases its practical value. However, this comes at the expense of important issues such as human capital wealth, inter-temporal consumption, and the elasticity of consumption with respect to wealth, all of which are standard in the portfolio theory literature which stems from the Life-Cycle/Permanent Income Hypothesis. Overall, though, these chapters treat important questions in a technical and yet accessible way that emphasises the practical application of difficult models to these real problems.

In the parts of the book dealing with the broad issues of retirement, pensions and saving, especially in the first section, there are unfortunately some issues of style and substance which make it difficult to recommend them. This section would have been more useful had the underlying economics been more clearly and rigorously explained, and if a greater range of the academic literature had been referred to (and less of the popular press). The style here is also sometimes too casual even for a practitioner volume, and there are numerous grammatical and typographic mistakes. In some cases, these make it difficult to understand exactly what the authors are trying to say on quite important questions.

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Priority Challenges in Pension Administration. Noriyuki Takayama, ed. Maruzen Co., Ltd, Tokyo, 2011, ISBN 978-4-621-08345-1, 254 pages. doi:10.1017/S1474747211000424

As the pension reform debate rages on into the third decade of its existence, since most of the participants in the debate are either from academia or development agencies, one of the three key pillars of reform has been neglected and barely addressed. Ultimately, one can evaluate the efficacy of a reform by its ABCs; namely, the size of **B**enefits promised (if DB) or targeted/achieved (if DC), the level and volatility of **C**ontributions imposed, and the ability of the government to **A**dminister the reform effectively. Effective administration of social security is a very complex exercise, and without an efficient administrative system at the many levels of the process, from the initial step of recording participants to collecting contributions and all the way to disbursing pensions, a reform can easily fail.

Into this void enters *Priority Challenges in Pension Administration*, to start to shed light on this critical topic. Based on a conference organized in Tokyo, the editor has stitched together the contributions to help countries address four major challenges: to (a) bring self-employed and participants in the informal sector into the mainstream; (b) keep costs low so that they are not a drag on pensions; (c) create greater acceptance; and (d) utilize information and communication technologies (ICT) which can deliver many services over vast distances, 'to maintain the social legitimacy of pension schemes and social security administrations'. This book could not have been more timely as many countries who adopted the 'Three Pillar Approach' or some variation of a 'Notional Defined Contribution' system are rethinking the key reform issues and the experiences with administration can help influence the future direction of reform.

The strength of this volume is that it has a truly international focus with exceptional case studies from both the developed and developing world. Its coverage of countries like Brazil, Canada, Denmark, Japan, Korea, The Netherlands, Sweden, The United Kingdom and The United States of America provides a treasure trove of information which would be of interest to reformers, the administrators of country pension schemes in the process of reform, and development agencies. These case studies highlight success stories and challenges in transitioning from an existing legacy administration to a new pension offering and implementation. It also addresses the future challenges faced by countries in Asia and Central Europe. Having had the fortune to spend time with the Social Security Protection Fund in Azerbaijan and view its amazingly high-tech administration system, one wishes that a case study on Azerbaijan had also been included in this book. The editor needs to be commended for not only organizing a conference to allow countries which have implemented reform to share ideas and experiences with countries on the verge of reform and potential transitions but also for producing a book that aims to serve as a compendium for those who seek such information.

To return to Azerbaijan, this is a case study that is worthy of merit, but missing in this collection. Their system has leveraged ICT extensively from electronic entry of participants into the system from various regional offices and issuance of social security identity cards (including verification to prevent duplication and fraud), to automatic scanning of forms into text-based records that highlight potential errors and an immediate validation against the central databases, to an electronic submission and reconciliation of contributions from employers and tax authorities (including participants who may be in one system but not the