determinants of health are the result of excessively high spending on high-tech medical services and drugs is not well supported. It is sensible to evaluate carefully the use of medical technology, but as Dan Brock (1989) put it in his review of Daniel Callahan's version of this proposal, 'the shameful inadequacies in many of our social welfare programs, including those designed to ensure that all citizens have basic goods such as food and shelter, as well as health care, are results of failures of political will, not of our failure to adopt strong age rationing of life-sustaining health care' (p. 312).

Even if we accept the notion that spending on health-care services limits investment in other socially useful programmes and services that produce health, it is still difficult to justify the proposal to eliminate public spending on health care for people who live beyond the average life expectancy. In contrast to claims about the cost of dying frequently repeated in the press, expenditure on acute care at the end of life falls as the age at death increases and end-of-life care represents only about one per cent of the US Medicare programme budget. It seems unlikely, therefore, that the book's proposal could generate sufficient savings to overcome the vast disparities in access to decent housing, food, education and other factors that contribute to the health of individuals and communities. It could, however, lead to socio-economic and racial disparities in access to life- extending medical technology within the older population. This book is worth reading because it raises important questions about the goals of health- care spending, but is also a reminder that diagnosing problems is easier than identifying workable solutions.

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Hazel Bateman (ed.), *Retirement Provision in Scary Markets*, Edward Elgar, Cheltenham, Gloucestershire, 2007, 256 pp., hbk £65.00, ISBN 13: 978 1 84376 906 4.

When an associate head of a school of economics collates the terms *retirement* and *scary markets*, any social scientist with an interest in pension policy and its outcomes may be piqued. The book collects the contributions to a 2003 workshop series and aims to identify potentially 'scary' aspects of private retirement provision, like the labour market or certain asset markets. Moreover, the book wants to relate country experiences and provide solutions. It combines contributions by scientists and practitioners in pension-fund regulation and investment management. The contributors all adopted an economic approach to the topic, which at times makes it difficult to understand for those unfamiliar

with advanced economic models or quantitative statistical analysis. Moreover, knowledge of Australia's, the United Kingdom's and the United States' pension systems is beneficial in appreciating the book's comparative dimensions.

From my own research perspective two contributions dealing with the connections between individual agents and scary markets are most interesting. The chapter by Mitchell and colleagues analyses the impact of earnings variability over the lifetime of pension wealth. Using data from the United States Health and *Retirement Study*, they demonstrate that amongst the country's older population, the lowest income groups experience the highest earnings variability, while also having more periods of income cuts. Their results show that earnings variability. over a lifetime, particularly reduces occupational pension wealth. Unfortunately the chapter only addresses the mean impact, and further evaluation of pension wealth effects for lower earners would have been very interesting. The chapter by Gardner and Orszag presents the results of a British survey about the response of older workers to the equity market downturn from 1999 to 2002. The authors provide an interesting overview of the scale of losses in this time. Among the different types of funded pensions available in the United Kingdom, people with personal pensions – the most individualised type – experienced the steepest decline in pension savings. The multivariate analysis shows a clear connection between high losses in pension savings and the decision to delay retirement. While pensioners also experienced savings losses, only a minority of them planned to return to work. The authors conclude that retirement is 'a largely irreversible decision' (p. 120).

Three chapters deal with different investment measures and their role in retirement saving: equities, index funds and fixed-interest portfolios. Two chapters discuss the phase of spending the accumulated pension assets, called decumulation. This topic could be of particular interest for European scholars, because problems of decumulation are currently absent from the agenda in these countries. The chapter by Brianton about fixed interest portfolios is of special relevance. Fixed interest portfolios are preferred as a low risk investment strategy for retirement savings. As with the so-called sub-prime lending turmoil, which has shocked the worldwide economy since mid-2007, these low-risk investments have become really scary. Some years ago those fixed-interest assets were mainly issued by sovereigns (government bonds). The author argues that more risky corporate bonds are increasingly included in those portfolios, which requires much higher skills of the investment managers and portfolio diversification. The chapter points to the role of a sovereign bond market that protects private pension savings. What will happen to this market in Europe when all governments achieve the European Union policy goal of zero debt and do not need to borrow money in the form of bonds anymore? Among the chapters are two with more or less contradictory results: while Bewley and colleagues favour a higher share of equities in retirement savings, Thorp, Kingston and Bateman find a more conservative investment strategy optimal, but Bateman fails to discuss the contradiction in her introduction. The book ends with three interesting and structured descriptions of the regulation of Japanese and Brazilian-funded pension systems, and the bankruptcy of an Australian company pension fund.

Although Bateman's book does fulfil its promise to identify aspects of scary markets and to present solutions, it would have benefited from a chapter summarising the findings, thereby clarifying and ordering the, at times, abstract results. Which aspect is scarier: the lack of equities in the savings portfolio or to suffer from pension wealth loss after earnings cuts? The main solution proposed in many of the chapters relies on a higher degree of asset diversification which would protect portfolios from financial market volatility. But to whom is this solution addressed? To individuals who try to make the best from their savings for retirement, or to fund managers? Which role could governments play in this regard? The overall conclusion of the book is quite general: 'private-funded retirement income arrangements are seen to be resilient to a wide range of scary market scenarios' (p. 1). Recalling the results for lower earners presented in the book (in Chapters 2, 5 and 6), this conclusion seems overly optimistic. Particularly for low earners, private pensions appear to be 'very scary' because of scary labour markets and because their pension wealth is too low to manoeuvre out of negative market returns.

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John Creedy and Ross Guest (eds), *New Developments in the Economics of Population Ageing*, Edward Elgar, Cheltenham, Gloucestershire, 2007, 688 pp., hbk £170, ISBN 13: 978 1 84542 982 9.

This volume includes 29 papers, all but one of which have appeared previously as journal articles. The authors have made a good selection, and the collection provides a sense of topics that have engaged economists concerned with population ageing. The papers focus on macroeconomic effects of population ageing on the standard of living (how well we live). Much of the popular concern is whether public pension and health-care systems will be sustainable. What economists bring to this discussion – their comparative advantage – is to focus attention on issues of supply (such as the productive capacity of the economy, or the size of the pie) as well as those concerned with demand (such as the claims made on the pie by older members of the population). On the supply side, for example, are behavioural responses to changes in market conditions that could affect productive capacity induced by population ageing?

In the shorthand of economists, the average standard of living can be represented by consumption per capita (C/N). It in turn can be expressed as an identity, $\frac{C}{N} = \left(\frac{T}{L}\right) \left(\frac{T}{N}\right) \left(\frac{L}{N}\right)$, the component parts of which are associated with the three sections of the volume. They are 'productivity and growth' (Y/L, output per employed person), 'consumption, saving and investment' (C/Y, the fraction of aggregate output that is consumed, the balance being saved and invested) and, with somewhat more of a stretch, 'labour and fiscal effects' (L/N, the fraction of the population that is employed). The decision to organise the volume in this way means that much research is excluded, for example, that concerned with migration, female labour-force participation, health care and environmental aspects. Even so, the range of topics covered and approaches identified is