Fiscal facts

Pension Finance
by David Blake
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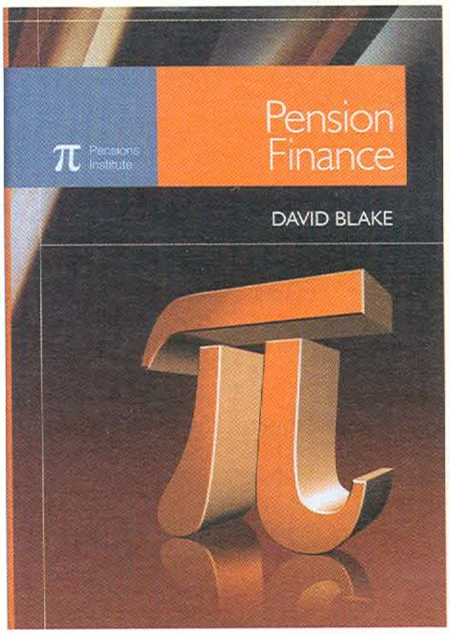
Adequate understanding of many key challenges and opportunities related to retirement security needs an understanding of pension finance. This book offers an up-to-date introduction to a wide range of topics in this area. The book covers DB as well as DC plans and corporate pension finance as well as pension fund management, performance measurement, risk management and pension insurance. Moreover a lot of terminology is defined and explained and information on institutions in the UK is provided.



The book targets a broad audience, ranging from investment consultants to pension regulators and from pension policy makers to pension accountants. Many chapters originate in academic teaching and remain very well suited for that purpose.

The heterogeneity in the target group implies that the discussion of a number of topics that are also covered in standard finance courses will be obvious to some, but only a very condensed introduction for others. This applies for example to the discussion of risk management and derivative pricing. Fortunately many textbooks are available that discuss these topics at any required level of depth. What makes this book unique is the discussion of many pension specific subjects that are not covered in other books.

The chapter in the book on DB pension funds, for example, explains the conflict of interest between the sponsor and the scheme members. The sponsor has written a put option to protect the entitlements of the members but also received a call option to benefit from premium holidays and restitutions if the investment returns exceed the expectations. The valuation of these options is discussed as well as the implications for preferred asset allocations. Likewise the discussions on corporate pension finance, pension fund management and longevity risk and the chapter on pension fund insurance are particularly informative and not available elsewhere.

The latter compares the financial regulation of pension funds in the UK with that of life insurers and banks and compares the set-up of the Pension Protection Fund (PPF) with that of its US equivalent, the Pension Benefit Guarantee Corporation (PBGC).

The rapidly developing literature on behavioural finance is not reviewed in this book. This literature contains many relevant findings related to the question whether individuals can cope of with all the decisions imposed on them in pension plans. This topic is considered at length though in a companion book, entitled "Pension Economics".

The book is brand new and likely to develop further in future editions. A next edition might discuss annuity markets and the annuity puzzle in more depth and could highlight the impact of reductions in human capital on the optimal exposure to stock markets over the life cycle. Perhaps even additional international comparisons of pension institutions can be included. This could relate, for example, pension insurance through the PPF and the statement of funding principles as required in the UK to the new Swiss and Dutch solvency rules for pension funds and to the upcoming Solvency II legislation. This would also open the opportunity to put more emphasis on hybrid schemes that have developed as alternatives to the pure DB and DC plans that are discussed in the book.

Notwithstanding these suggestions for subsequent editions, the book clearly fills an important gap and is to be highly recommended for everyone with a professional or academic interest in pension finance.

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Redefining risk

Curious contracts: Pension fund redesign for the future
by Theo P Kocken
ISBN 90-72194-78-0
241 pages hardback
Available free of charge from www.cardano.com
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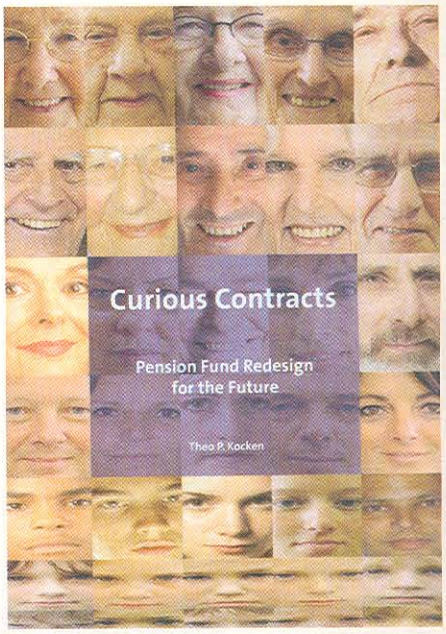
On December 11, 2006, Theo Kocken of Cardano Risk Management in Rotterdam, The Netherlands defended his PhD thesis 'Curious Contracts'. His thesis contains a number of interesting, innovative elements, which imply an entirely new way of looking at pensions and the future of pensions provision.

Kocken views a corporate pension fund as a package of embedded options and analyses the implications for pension redesign and hedging. The three most important options identified are: (1) the indexation option, ie the obligation of the beneficiaries to waive (wage or price inflation) indexation when the fund's funding ratio drops below a certain level, (2) the employer guarantee option, ie the obligation of the parent company to restore the fund's funding ratio to a certain level, and (3) the default option, ie the credit exposure of the beneficiaries to a simultaneous default of the parent company and a funding deficit in the pension fund.



The latter option is certainly not hypothetical. In the US, the Pension Benefit Guarantee Corporation is looking at an expected loss for US beneficiaries due to defaults of companies with funding deficits of no less than $100bn (€76.8bn).

Proper valuation and sensitivity analysis of the above three options provides a number of insights. It shows for example that the relative risks, which employers and beneficiaries take in a pension fund depend heavily on the employer's credit rating, the pension fund's volatility and the funding ratio of the fund. In case of an AAA-rated sponsor with a highly volatile fund and low funding ratio, the employer is the risk taker. In a pension fund with a high funding ratio and a low rated mother company on the other hand, the beneficiaries absorb most of the risks.

All around the western world, the combination of an ageing population, new accounting rules, new regulation and adverse market conditions has changed employers' attitude from risk takers to risk avoiders. This has led to a system in which employers will only provide a stable contribution rate.

The retreat of the employer as a risk taker has led to a completely new distribution of risks in pension funds. Using his embedded options approach, Kocken makes it painfully clear that the redistribution of wealth between active participants and retirees will eventually derail. In the long run, a shift to individual DC will, in the current collective pension fund design, make the active participants better off. This is true irrespective of the lack of solidarity and inflation indexation, which this implies.

Kocken shows that in a system without employers both risk and return are negatively skewed towards active participants. His thesis arrives at a solution, which unifies the best features of two competing systems: DB pension plans and Life Cycle DC plans. In Kocken's ideal system, collective risk sharing is still possible, but only by transferring options at fair market prices. This means that people closer to retirement take less risk. Younger people take most of the risks, but with higher upside potential than they have today; a fair risk-return trade-off therefore.

Kocken's collective risk sharing system between active participants and retirees does not require any additional solvency on top of the collective pensions sum. This stems from the fact that in his new pension system, active participants provide a kind of guarantee to the retirees.

In fact, active participants' wealth accumulation serves as the equity (read: solvency) for the retirees, who implicitly own the senior debt of the pension fund. This implies that pension fund capital requirements, which in The Netherlands for example amount to 20%-30% of total pension liability value, can be abandoned.

In summary, Kocken's approach provides an interesting solution to many current problems in the pensions industry. As such, this thesis is highly recommended reading for everyone interested in the future of our pensions system.

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