Scandinavian Actuarial Journal ›
Volume 2004, 2004 - Issue 5

Miscellany

On accounting standards and fair valuation of life insurance and pension liabilities

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Pages 372-394 | Received 28 Jun 2004, Published online: 01 Sep 2006

Cite this article https://doi.org/10.1080/03461230410000556

Abstra

The actu ... s for a fruitful c ... &P) liabilities ... d focus on market v ... rd setters, the fi ... iness.

This a ... ments in relation ... rds and the backgro ... ed. We then review a ... appropriate techniqu ... e definition of the co ... nt and quite innovati ... Danish market for life and pension insurance.

Keywords:

Accounting standards

fair value

financial valuation

regulation

Notes

I am grateful for the comments and suggestions of an anonymous referee, Morten Balling, Anders Grosen, Peter Hermann, Jan Bo Jakobsen, Per Linnemann, Jens Perch Nielsen, Mogens Steffensen, and Frank Thinggaard. I am particularly indebted to Søren Andersen, Michael Harboe-Jørgensen, and Charlotte Møller for fruitful discussions and for sharing their insights on the Danish market value rules and regulation. I would also like to thank Henrik Steffensen of PriceWaterhouseCoopers for granting me access to PWC's excellent Comperio database. All errors are my own responsibility.

PETER LØCHTE JØRGENSEN

Julietta, the Accountant: “Would you like to check my figures?”James Bond: “Oh, I'm sure they are perfectly rounded!”

– James

Jørgense … nd pension liabilitie

As quote

This pro … d to value based a

See l … e Annex.

An exam … nent or the financial … ill determine whether … iability.

See also

In the June 2002 Exposure Draft for a revised IAS 39, recent transactions prices were allowed as a basis for fair value measurement. This possibility has now been removed.

This hierarchy was first presented in the June 2002 Exposure Draft for a revised IAS 39.

Dicke (1998) mentions rare cases where secondary markets for insurance policies have existed.

See International Association of Actuaries (2000) for a deeper discussion of the possibilities for estimating fair values of liabilities when financial markets are complete and incomplete, respectively.

One challenge here is to get good bond price observations covering the far end of the maturity spectrum. Unfortunately, government bonds with maturities above 20–30 years are relatively rare in most countries. In contrast, corporate bonds with maturities up to 100 years are not uncommon. IBM, Walt Disney, ABN-AMRO, and Coca Cola are examples of large international corporations that have issued 100 year bonds (see e.g. Grinblatt & Titman (2002)).

The reader is also referred to Sheldon & Smith (2004) for a general introduction to market consistent valuation of L&P products.

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spread currently amounts to about 10–20 basis points, but historical values have exceeded 50 basis points. For further details of the calculation principle, the reader is referred to The Danish Financial Supervisory Authority (2001).

The term structure of zero-coupon interest rates tends to lie above the Danish FSA's reference rate in the long end of the maturity spectrum and below the reference rate in the short end. Casual empiricism suggests that "young" pension funds with relatively long liabilities tend to choose zero-coupon interest rates for discounting their projected cash flows, whereas mature pension funds and life insurance companies with relatively shorter liabilities tend to use the Danish FSA's reference rate. This indicates that L&P companies tend to choose the discounting methodology that minimizes the estimated value of liabilities.

Rules for sharing the investment (and insurance) surplus should follow the contribution principle and guidelines are formulated in a separate executive order issued by the Danish FSA. These guidelines have had to be revised and updated several times in connection with the issuance of the new market value reporting requirements, see The Danish Financial Supervisory Authority (2004).

Prior to 1997 the maximum allowable portfolio weight in stocks was 40%. It was raised to 50% between 1997 and 2000.

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subsequently reached fame partly because of what was considered a truly controversial

attitude to pension fund management, and partly because of the exceptionally fine timing of the switch, which was completed just prior to “9–11” and the subsequent burst of the stock market “bubble” in 2001, see e.g. The Boots Company (2001) and Nicholson (2004).

See Mercer Oliver Wyman (2004) and The Economist (2004a).

See The Economist (2004b) and Watson-Wyatt (2003).

Related Research Data

The pricing of equity-linked life insurance policies with an asset value guarantee
Source: Journal of Financial Economics
Fair valuation of path-dependent participating life insurance contracts
Source: Insurance Mathematics and Economics
Fair valuation of life insurance liabilities: The impact of interest rate guarantees, surrender options, and bonus policies
Source: Insurance Mathematics and Economics
Valuation of guaranteed annuity conversion options
Source: Insurance Mathematics and Economics
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Source: Journal of Risk & Insurance
Pricing and hedging guaranteed annuity options via static option replication
Source: Insurance Mathematics and Economics
Guaranteed Annuity Options
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The Life Insurance Policy as an Options Package
Source: Journal of Risk & Insurance
Guaranteed Investment Contracts: Distributed and Undistributed Excess Return
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Theory of Rational Option Pricing
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Life Insurance in a Contingent Claim Framework: Pricing and Regulatory Implications
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On the Risk of Insurance Liabilities: Debunking Some Common Pitfalls
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Equity-linked life insurance: A model with stochastic interest rates
Source: Insurance Mathematics and Economics
The Pricing of Options and Corporate Liabilities
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Alternative Investment Strategies for the Issuers of Equity Linked Life Insurance Policies with an Asset Value Guarantee
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Return smoothing mechanisms in life and pension insurance: Path-dependent contingent claims
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Source: Journal of Risk & Insurance
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