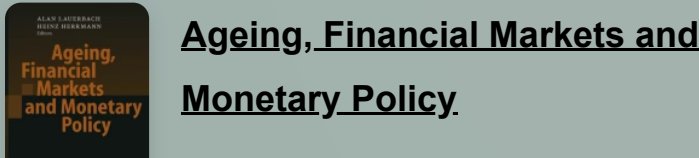


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# Developments in Decumulation: The Role of Annuity Products in Financing Retirement

Conference paper

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continuous stream of benefits until he dies. The insurer, or annuity provider, pools longevity risk across all contract-holders and is thus able to offer longevity insurance for the customer population.

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Brown, J. 2001. *Redistribution and Insurance: Mandatory Annuitization with Mortality Heterogeneity*, JFK School, Harvard, Cambridge, MA.

[Google Scholar](#)

Brown, J., O. S. Mitchell and J. Poterba. 2000 [BMP2000]. The Role of Real Annuities and Indexed Bonds. In an Individual Accounts Retirement Program. In *Risk Aspects of Investment-Based Social Security Reform*. Ed. J. Y. Campbell and M. Feldstein. NBER: University of Chicago Press: pp. 321–360.

[Google Scholar](#)

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Brown, J. R. and M. J. Warshawsky. 2000. *Longevity-Insured Retirement Distributions from Pension Plans: Market and Regulatory Issues*. Working Paper prepared for the Brookings/SIEPR/TIAA-CREF Institute Conference on Public Policies and Private Pensions. Washington, D.C: September, pp. 21-22.

[Google Scholar](#)

Brynjolfsson, J. B. and F. J. Fabozzi, eds. 1999. *The Handbook of Inflation-Indexed Bonds*. F.J. Fabozzi Associates. New Hope, PA.

[Google Scholar](#)

Caplin, A. Forthcoming. Turning Assets into Cash Problems and Prospects in the

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Doyle, S., O. S. Mitchell and J. Piggott. 2001. *Annuity Values in Defined-contribution Retirement Systems: The Case of Singapore and Australia*. NBER Working Paper No. W8091.

[Google Scholar](#)

European Commission. 1997. *Supplementary Pensions in the Single Market: A Green Paper*. [http://eitropa.eu.int/comm/mtemal\\_market/eii/finances/pem](http://eitropa.eu.int/comm/mtemal_market/eii/finances/pem)

[Google Scholar](#)

Feldstein, M. and E. Rangelova. 2000. *Accumulated Pension Collars: A Market Approach to Reducing the Risk of Investment-Based Social Security Reform*. NBER Working Paper No. W7861.

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Presented at the World Bank Conference on New Ideas About Old Age Security, Washington, D.C.

[Google Scholar](#)

Jennings, R. M. and A. P. Trout. 1982. *The Tontine: From the Reign of Louis XIV to the French Revolutionary Era*. Huebner Foundation Monograph Number 12. Wharton School, University of Pennsylvania. Philadelphia, PA.

[Google Scholar](#)

Lemaire, J. with the assistance of K. Subramanian. 1997. *Insurance Regulation in Europe and the United States*. Huebner Foundation Monograph Number 16. Wharton School, University of Pennsylvania. Philadelphia, PA.

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November 1997, pp. 3–36.

[Google Scholar](#)

Mitchell, O. S., B. Hammond and A. Rappaport. 2000. *Forecasting Retirement Needs and Retirement Wealth*. Pension Research Council. Philadelphia, PA: University of Pennsylvania Press.

[Google Scholar](#)

Mitchell, O. S. and D. McCarthy. 2001. *Estimating International Adverse Selection in Annuities*. Pension Research Council Working Paper. Wharton School. Philadelphia, PA: University of Pennsylvania.

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Ward, P. 1996. *The Great British Pensions Robbery*. Waterfall Books, 2nd ed. Lancashire, UK.

Warshawsky, M., J. B. Spillman and C. Murtaugh. Forthcoming. Integrating the Life Annuity and Long-term Care Insurance: Theory, Evidence, Practice, and Policy In: Z. Bodie, B. Hammond and O. S. Mitchell, eds. *Innovations in Retirement Financing*. Pension Research Council. Philadelphia, PA: University of Pennsylvania Press.

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