

Analysis of Variable Benefit Plans

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The operational characteristics of a group pension scheme with fixed annual contributions and variable benefit accruals are studied both analytically and by simulation using an aggregate funding requirement under the assumption of a constant valuation rate and log-normal returns. The distribution of the pension entitlement at retirement is compared under three different parameter sets for asset returns. The performance of the variable benefit plan is then compared to a DC benchmark in terms of the proximity of the retirement benefits to the targeted benefit level. Finally, practical modifications to the benefit policy are considered and their effect on performance is assessed.