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Book Review

The Analysis of Insurance Earnings: An Enterprise Approach by John McGarry and Kevin Pledge

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This book is all about granularity. The authors envision a data warehouse with information at the policy level or lower, and demonstrate how this data can be used to analyze the sources of earnings. They consider not only traditional life and universal life products, but also disability income, payout annuities, health insurance and segregated fund plans.

The key to their analysis is the data warehouse, which links each policy, not only to valuation assumptions and results, but also to general ledger accounting amounts and to projections (model output that feeds the financial plan). By conducting the analysis on a monthly basis, they are able to disregard secondary effects, such as the effect of lapsation on claims and other similar interactions.

Extensive formulas are provided throughout the book, along with numerical examples. A few typos were found, but fortunately they were in the narrative portions, not in the formulas themselves. Other analysts

might have selected slightly different ways of combining data, but their approach seems reasonable.

Some special handling is needed to get the most out of the process. Investment income and administrative expenses must be driven to the policy level through some form of allocation. The treatment of new business is separated from existing in force, because the key driver of variance for this business is whether the volume of production matches plan. Once new business is put on the books, it can be analyzed with some of the same formulas as beginning in force. In the book, reinsurance is also treated separately, although the analysis of direct business and reinsurance can be subsequently combined if management prefers looking at net results.

This book provides a useful reference for actuaries who use or are considering a data warehouse for their financial reporting and analysis. ■