The technical provisions in Solvency II - what EU Insurers could do if they had schedule P

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The goal of this paper is to demonstrate how publicly available data can be used to calculate the technical provisions in Solvency II. This is a purely hypothetical exercise, since the publicly available data is in America, and Solvency II applies to the European Union. Using American Schedule P data, this paper:

1. Develops "prior information" to be used in an empirical Bayesian loss reserving method.
2. Uses the Metropolis-Hastings algorithm to develop a posterior distribution of parameters for a Bayesian Analysis.
3. Develops a series of diagnostics to assess the applicability of the Bayesian model.
4. Uses the results to calculate the best estimate and the risk margin in accordance with the principles underlying Solvency II.
5. Develops an ongoing process to regularly compare projected results against experience.

The paper includes analyses of the Schedule P data for four American Insurers based on its methodology.