



Figure 1: The effect of sample size on Monte Carlo accuracy. The graph shows the probability that the upper bound of the 95% Jeffreys confidence interval for p_0 lies below $\kappa_0 = 0.005$ when $p_0 = \kappa_0/2$.

and computationally cheap upper bound may be of more practical use than an approximation. Section 6.1 also discusses indirect ways to assess the compression error, using the upper bounds.

Monte Carlo simulation is an attractive alternative to Panjer recursion, because it comes with a simple assessment of accuracy, is easily parallelisable, and the sample drawn can be used to calculate other quantities of interest for insurers like the net aggregate loss and reinsurance recovery costs.

5 TRACTABLE SPECIAL CASES

In this section we consider three tractable special cases.