Pitfalls in Prediction: Bootstrapping GLMs for Reserving

GLMs are becoming widely used to model losses in general insurance, but it is difficult to produce prediction intervals from GLMs. As a result, the residual bootstrap is a popular tool for obtaining prediction intervals for these models. The Pearson residual is standard for a GLM bootstrap, but using it leads to an incorrect estimate of the predictive distribution for some GLMs. This has direct consequences for insurers and regulators.