

Reserving in Presence of Backlog Claims

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Abstract

This thesis studies insurance claims reserving in the presence of unprocessed backlog claims. Through a simulation study, we evaluate how well different reserving methods applied to recovered reported claims perform compared to chain-ladder on processed claims and oracle reported claims, given different capacities of the claims handling unit, and how much information we obtain from a claim when processed. Reported claims are recovered through penalized least-squares optimization. Key findings are that correctly estimating the maximum development period and using a non-zero regularization parameter are both critical for reserving performance. In addition, a generalized credibility predictor of outstanding claims adapting to the backlog yields results comparable to chain-ladder on oracle reported claims.

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