



**TITLE** An approach to the Individual Claims Reserving method

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**Key words:** loss reserving; individual claims reserving; IBNR; RBNS; mixed multinomial logit model; renewal processes; negative binomial process

**Purpose of your paper:** better estimation of loss reserves in non-life insurance

**Synopsis:**

The calculation of the mathematical reserves is one of the most important activities that general insurance companies need to perform to maintain adequate capital and meet future liabilities. Most of the literature in loss reserving is based on claims data aggregated over run-off triangles with two coordinates: accident year and development year. Traditional examples are the Chain Ladder and the Bornhuetter-Ferguson methods, which are widely used by companies in practice.

However, there is much more information available for each claim, such as the reporting delay, closing date, payment dates and the amount of each payment, which is not considered by the traditional loss reserving methods.

The purpose of Individual Claims Reserving is to use that information to obtain reserve estimates with smaller reserve errors and higher precision. We propose an approach to Individual Claims Reserving, stochastic in essence, performing simulations of the number of claims and their amounts to give estimations of the IBNR and the RBNS claims.

We test our method on real data from European insurance companies and compare our results against the more traditional loss reserving methods.

**References:**

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