

Title: Model Frequency with Binomial Distribution for Claims Made Policies

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Abstract

Claims made policies are more suitable than occurrence made policies for such insurance lines as professional liabilities, in which reporting lags contribute substantially to the volatility in reserve. Frequency-Severity simulation is an important technique to get the properties of the distribution of aggregate loss, such as percentiles, VaR and CVaR, etc, especially for complex insurance structure with aggregate deductible and limits. Current practice still models frequency based on Poisson distribution which is more suitable for occurrence made policies. Because information pertaining to claim count such as number of notices become available as policy ages, it would make more sense to model claim frequency based on binomial distributions which are capable of incorporating this information. In this presentation, I show how binomial based model can improve the projection of expected value and volatility of aggregate losses for frequency severity simulation.