

Stochastic Incremental Approach For Modelling The Claims Reserves

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Abstract. We focus on calculation of claims reserves using a stochastic incremental approach (stochastic Chain Ladder using only incremental payments), and for that we establish the required formulae and we put our assumptions by modifying Mack's model. We will next concentrate on the calendar year view of the development triangle, to clarify more we propose a new tabulation form, then we apply the CDR for both cases (incremental approach and calendar year view). By using the incremental vision we avoid a step of calculation (no need to calculate the cumulative triangle), and we got identical results with easier formulae which brings a lot of advantages for insurance companies.

Keywords. Stochastic Claims Reserving, Chain-Ladder Method, Mack's Model, CDR, Incremental Payments, Calendar year view.