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Ruin problems in presence of underwriting cycles

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Abstract.

This presentation studies the ruin problem in presence of underwriting cycles. Analytical results for the ultimate ruin probability are derived under an AR(2) dynamics for the premium income in the light-tailed claims case. The typical path to ruin is discussed. Then, a comparison is made with the classical case for light-tailed claims. Numerical illustrations allow for a better understanding of the impact of underwriting cycles on the risk borne by insurance companies.