Optimal dynamic reinsurance policies for large insurance portfolios. (English summary)

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Summary: “We consider a large insurance company whose surplus (reserve) is modeled by a Brownian motion. The company invests its surplus in stock market assets which may or may not contain an element of risk. To minimize the insurance risk there is a possibility of reinsuring a part or the whole insurance portfolio. We consider the case of proportional reinsurance. There is a transaction cost, which manifests itself in the fact that the safety loading of the reinsurer is larger than that of the cedent. Stochastic optimal control theory is used to determine the optimal reinsurance policy which minimizes the ruin probability of the cedent.”

**References**

1. Asmussen, S.: Approximations for the probability of ruin within finite time.
Actuarial J. 1, 55–68 (2001) MR1834972


Note: This list reflects references listed in the original paper as accurately as possible with no attempt to correct errors.

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