SURVIVAL MODELS WITH LONG-TERM SURVIVALS: AN APPLICATION TO LARGE DATABASES IN THE FINANCIAL AREA

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- ABSTRACY: Survival models with long-term survivals accommodate the heterogeneity of two populations (susceptible and immune to the event of interest). To illustrate the applicability of such models to large databases in the financial area we consider the model proposed by [3], assuming Weibull and log-logistic distributions for the lifetimes. A simulation study was performed in order to test the difference between the Kaplan-Meier curve and the fitted one as an alternative to the usual metrics of adjustment, according to different censoring percentages and sample sizes. We observed that the distance between the curves is capable to select the more appropriate model for the data in presence of long-term survivals for small and large client portfolios, even in the presence of censoring.

- KEYWORDS: Survival; financial data; long-term; criteria for model selection.

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