



A new non-default rate regression model for credit scoring data: An application to a Brazilian bank personal loan portfolio data

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In this paper we propose a new no-default rate survival model. Our approach enables different underlying activation mechanisms which lead to the event of interest. The number of competing causes which may be responsible for the occurrence of the event of interest is assumed to follow a geometric distribution while the time to event is assumed to follow a inverse Weibull distribution. As an advantage our approach may scan all underlying activation mechanisms from the first to last one based on order statistics. We explore the use of maximum likelihood estimation procedure. Simulation studies are performed and experimental results are illustrated based on a real Brazilian bank personal loan portfolio data.

Keywords: Geometric distribution; Inverse Weibull distribution;; Lifetime data; Non-default fraction models.