



Modeling Strategies for Prediction of Hedge Fund Failure: A Comparison of Parametric and Semi-Parametric Approaches

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Abstract

The proportion of hedge funds failing every year is on average of 10%. Past literature has addressed this phenomenon using a ad-hoc model without understanding which fits the data better. In this study, we run a comprehensive study of parametric and semi-parametric models to fit this event. The data is constituted by more than 3,000 funds over the last 15 years using either only static covariates or allowing some to be time-varying. The time-varying covariates allow a possibly more precise description of the impact of hedge fund's characteristics on their prediction to failure.

Keywords: Cox model; parametric survival models; proportional odds model; time-varying covariates.