1086-VI-1796   **YUTING HSU*** (`yzh1@psu.edu`). *Statistical Analysis of Firm Interdependence Using Duration Data—Semiparametric Approach.* Preliminary report.

"Does the pioneer in an industry have a better chance to survive than its competitors?" We formulate a probability model to analyze the problem using right-censored data as follows. A new product first enters the market as the monopolist and later experiences the competition when the similar product is introduced to the market by another company. The main interest is to estimate the distribution of the survival (monopoly and competition) durations and investigate the impacts of the regressors. We propose a Lehmann model with Frailty and establish distribution-free estimation to verify the validity of the parametric model in the previous analysis and reexamine the relation of the competitive products and the significance of the regressors. (Received September 24, 2012)