Journal of Econometrics 24 (1984) 397–403. North-Holland

LINEAR REGRESSION AND THE YULE DISTRIBUTION

Evdokia XEKALAKI

University of Missouri, Columbia, MO 65201, USA

Received March 1982, final version received August 1983

The Yule distribution is shown to have certain interesting properties in the area of regression analysis. In particular, it is shown that under certain conditions, a random variable Z will have linear regressions on another random variable X and on its observable part Y only when X has a Yule distribution. More generally, the regression on the observed part Y will be constant for a finite number of values of Y, say k, and linear otherwise, only when X has a Yule distribution with its first k frequencies truncated.