RELATING QUANTILES AND EXPECTILES UNDER WEIGHTED-SYMMETRY

BELKACEM ABDOUS AND BRUNO REMILLARD

Département de mathématiques et d'informatique, Université du Québec à Trois-Rivières, C.P. 500, Trois-Rivières, Québec G9A 5H7, Canada

(Received May 10, 1993; revised October 5, 1994)

Abstract. Recently, quantiles and expectiles of a regression function have been investigated by several authors. In this work, we give a sufficient condition under which a quantile and an expectile coincide. We extend some classical results known for mean, median and symmetry to expectiles, quantiles and weighted-symmetry. We also study split-models and sample estimators of expectiles.

Key words and phrases: Quantiles, expectiles, weighted-symmetry, split-models.