

Long-range dependence in the carbon emission market

Abstract

This paper investigates the long-range dependence of returns and the volatility of the carbon emission permits in the Chicago Climate Exchange. It is found that contracts with different vintages demonstrate significantly variant long memory properties. In particular, strong long memory is found for vintages from 2003 to 2006, while no evidence of long range dependence in the return series is found for vintage 2007 to vintage 2010.