Nonlinear mean reversion in stock prices : Evidence from Asian markets

Abstract

Utilizing the standard linearity test of Luukkonen et al. (1988), the linear nature of all the Asian stock indices has been formally rejected. This finding warrants use of the nonlinear stationary test of Kapetanois et al. (2003), which is also constructed in the STAR framework, to investigate the mean reverting property of the stock prices series. As a whole, this study not only found convincing evidence of a nonlinear mean reverting pattern in all the Asian stock indices, but also demonstrates the risk of drawing the wrong inferences on mean reversion when the ADF test is applied to data governed by nonlinearity.