A non-parametric cointegration test of purchasing power parity: the case of Malaysia

Abstract

This study employs the Johansen and Juselius (1990) cointegration test and the recently proposed Bierens (1997) nonparametric cointegration methodology to test the purchasing power parity (PPP) hypothesis for the Malaysian economies, with respect to her major trading partners- the United States, Japan and Singapore. The Bierens’s non-parametric cointegration method is utilized in views of the superiority of non-parametric method at detecting cointegration when the data generating process is non-linear. Using the Johansen and Juselius cointegration approach, the evidence does not support the PPP proposition for all cases under investigate. Further analysis using the Bierens’s method, however, provides strong support for the PPP hypothesis for the Malaysian economies, with respect to U.S., Japan and Singapore. Since the Bierens’s method allows for non-linearity in the data generating process, the discrepancy between the findings from both techniques is interpreted as a consequence of significant non-linearity in the real exchange rate adjustment to PPP.