An empirical investigation of purchasing power parity for European economic integration : 購買力平價說之實證研

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ABSTRACT

Since the crisis resulted from a Greek sovereign debt issue into a comprehesive financial crisis for the European Union (EU) as a whole. For the purpose, in this paper we examine convergence towards purchasing power parity (PPP) within the European Union (EU). The data are monthly for the period 1999.01~2010.03 after the Maastricht Treaty Meeting that introduction of the euro. The study applies a new nonlinear threshold unit root test to the bilateral real exchange rates (RERs). The mixed evidence found in the earlier studies on the validity of PPP within the euro area added to the accumulating theoretical argument and the evidence that some RERs exhibit nonlinear mean reversion motivate us to use nonlinear unit root tests to further test the validity of PPP within the euro zone and between the euro area and other primary partners. The existence of nonlinearity in RERs, which is one potential source arises from nonlinearities in international goods arbitrage because of factors such as transportation costs and trade barriers, causes a price gap among similar goods traded in spatially separated markets. Another source of nonlinearity in RERs comes from official interventions in the foreign exchange market, which might cause the nominal and RERs to move away from the equilibrium levels. The exchange rates may adjust nonlinearly toward their long-run equilibrium with the speed of adjustment varying with the distance from the equilibrium level. To our best knowledge, the direct application of nonlinear unit root tests to the bilateral RERs of the euro area countries is absent in literature. In our study, we apply the methodology developed by Caner and Hansen (2001) that allows us to simultaneously investigate non-stationarity and nonlinearity of RERs to test the Economic Integration is success or not?

Keywords : purchasing power parity、nonlinear threshold unit test、real exchange rates、economic integration

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