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# Real interest rate parity in the ASEAN-5 countries: a nonlinear perspective

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This article aims at testing real interest parity (RIP) by using nonlinear unit root tests. The results from Kapetanios *et al.* (2003) demonstrated that the adjustment of ASEAN-5 real interest rates towards real interest rates in Japan and the US follows a nonlinear (stationary) process. Overall, the evidence is in favour of RIP.

## I. Introduction

Increasing attention has been given in literature on how real interest rates in different countries interact and how this interaction has developed over the past few decades. This is because it has important implications on domestic stabilization policy. Additionally, theory hypothesized that in a world of perfect capital mobility and real exchange rates converges to their equilibrium levels (i.e. purchasing power parity holds), *ex ante* real interest rates should move together in the long run. Thus, the extent to which they move together over time provides an indication of the degree of capital mobility.

The present article aims at examining one of the building blocks in international finance – the real interest rate parity (hereafter RIP). To this end, we drew a sample from five large ASEAN countries (ASEAN-5: Malaysia, Singapore, Indonesia, Thailand and the Philippines) over two decades,

a period characterized by increasing liberalization of the capital markets. Recently, the transformation has been further accelerated with the deregulation of money markets in both the developing and developed market.<sup>1</sup> Nonetheless, earlier studies on RIP on this group of countries have had difficulty in detecting convergence of real interest rates (Chinn and Frankel, 1995).<sup>2</sup> The seeming rejection of RIP may be due to the well-known weakness of standard unit root tests in temporally limited samples.

Recent empirical work by Holmes and Maghrebi (2004), Liew *et al.* (2004) and Taylor *et al.* (2001), among others highlight the importance of nonlinearities in influencing the outcome of international parity tests. Furthermore, studies have shown that the half-life of shocks in such model is found to be dramatically shorter than that obtained in linear models. Perhaps an important result from all these studies is that evidence in favour of the parity condition markedly strengthens when nonlinearities

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<sup>1</sup>During the past two decades, financial institutions and markets have undergone major transformations. These include structural changes in markets for financial services, improved communications, and production technology, and increasing interdependence and integration of financial and economic systems.

<sup>2</sup>Chinn and Frankel (1995) concluded that, with few exceptions, RIP does not hold for Pacific Rim rates.