



Evidence of long-run purchasing power parity: analysis of real asian exchange rates in terms of the Japanese yen

Raj Aggarwal^a, Antonio Montañés^{b,*}, Monserrat Ponz^b

^aJohn Carroll University, Cleveland, OH 44118, USA

^bDepartamento de Analisis Económico, Facultad de Ciencias Económicas y Empresariales,
University of Zaragoza, Gran Vía 2, 50005 Zaragoza, Spain

Received 2 July 1999; received in revised form 23 May 2000; accepted 14 July 2000

Abstract

In this paper we find strong new evidence in favour of the long-run purchasing power parity (PPP) hypothesis in the bilateral real exchange rates between the Japanese yen and the currencies of the most important southeast Asian economies only when the presence of several possible structural breaks of the series is taken into account. Such evidence for PPP is weaker for these southeast Asian exchange rates with the US dollar, the German mark and the Australian dollar. © 2000 Elsevier Science B.V. All rights reserved.

JEL classification: F31; C22

Keywords: Real exchange rate; Unit roots; Level shifts

1. Introduction

Several recent studies have been devoted to the study of evidence in favour of a ‘yen bloc’ [e.g. Aggarwal and Mougoué (1997, 1998) or Tse and Ng (1997)]. Cointegration techniques and unit root tests have been applied in order to prove the linkage between the Japanese yen and the most important southeast Asian currencies. As is well known, the Japanese economy is the major investor and loan supplier of the rest of the smaller economies in the southeast Asian area. The flows of Japanese imports and exports are also the most important for these economies. Thus, it is understandable that the above mentioned papers find evidence in favour of a yen-dominated Asian exchange rate system based on the stationarity of nominal exchange rates.

* Corresponding author. Tel.: +34-976-76-22-21; fax: +34-976-76-19-96.

E-mail address: antonio.montanes@posta.unizar.es (A. Montañés).

In spite of the important results reported in these papers, we contend that the analysis of the relationship between real exchange rates in the region would be even more useful. The degree of conformity to the purchasing power parity (PPP) hypothesis is likely to be a more powerful tool to examine the relationship between the Japanese yen and the currencies of other Asian economies. If we can find evidence in favour of the PPP in these real Japanese yen exchange rates, it would be strong evidence of the integration between the Japanese economy and those of other Asian countries. However, many of the empirical works devoted to the PPP hypothesis have often refuted this. Such a lack of evidence is especially remarkable for bilateral real exchange rates in the post Bretton-Woods era (e.g. Froot and Rogoff, 1995, amongst others). The case of the Japanese yen is no exception and there is little evidence, if any, in favour of the PPP hypothesis between the Japanese economy and the economies of the rest of the world.

Some authors, such as Dropsy (1996), have tried to identify the nature of this failure. One of the explanations offered is that the traditional unit root tests lose power under the omission of some structural breaks. In this sense, Perron (1989, 1990) and Montañés and Reyes (1998) have shown that the omission of such breaks implies a poor performance on the part of the traditional unit root tests. Consequently, it seems advisable to develop and use tests that take the presence of structural breaks into account and to see if the presence of such breaks may help to provide stronger evidence against the unit root null hypothesis of the bilateral real exchange rates. Here, we should note that the presence of these breaks in reality implies non-compliance with the long-run PPP hypothesis. On the other hand, we should recognise that the rejection of the unit root null hypothesis versus a mean-shift alternative provides evidence in favour of the presence of a mean-reversion process. These two apparently contradictory results may be reconciled if we interpret them as a weaker version of long-run PPP. For example, Hegwood and Papell (1997), who report the presence of multiple breaks in the real exchange rate of the most influent Western currencies, have referred to this version as quasi long-run PPP.

Against this background, this paper documents the rejection of the unit root hypothesis among a group of Japanese yen exchange rates of a group of southeast Asian countries and finds strong empirical evidence for accepting the existence of a 'yen bloc' in the southeast Asian region. There is somewhat limited evidence that a weaker version of the PPP hypothesis also holds for these southeast Asian exchange rates in terms of the American dollar, the Australian dollar and the German mark, providing evidence of the integration of markets globally.

The remainder of the paper is organised as follows. Section 2 briefly reviews the literature on real exchange rates and the PPP hypothesis and Section 3 details our statistical testing procedures. Section 4 presents the data and describes the empirical results. Finally, some conclusions end the paper in Section 4.

2. Evidence on purchasing power parity and research strategy

There seems to be fairly strong evidence that real exchange rates, i.e. exchange rates adjusted for international differences in inflation rates, tend towards purchasing power parity in the very long run. However, the speed of adjustment seems to be low and there are

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات