Market efficiency, purchasing power parity, and the official and parallel markets for foreign currency in Latin America

Panayiotis F. Diamandis

Department of Business Administration, Athens University of Economics and Business, GR-10434, Athens, Greece

Received 26 February 2001; received in revised form 1 October 2001; accepted 5 November 2001

Abstract

This paper examines the purchasing power parity (PPP) theory from a long-run perspective in the presence of a parallel or ‘black’ market for U.S. dollars in four Latin American countries, namely Argentina, Brazil, Chile, and Mexico, using monthly data for the recent float. Johansen’s full information maximum likelihood multivariate cointegration technique is applied. Recent developments associated with this procedure are considered. First, a formal test developed by Johansen [Econometric Theory 8 (1992) 188, Econometric Theory 11 (1995) 25, Scand. J. Stat. 24 (1997) 433] for the presence of $I(2)$ and $I(1)$ components in a multivariate context is applied along with the estimation of the roots of the companion matrix for the correct determination of the cointegration rank. Second, given that two significant cointegration vectors were found for any country, structural restrictions identifying the long-run relations of interest are specified as proposed by Johansen and Juselius [J. Econometrics 63 (1994) 7] and Johansen [J. Econometrics 69 (1995) 111]. Thus, the joint structure of PPP and long-run informational market efficiency could not be rejected for all countries. Furthermore, estimation of the error correction terms shows that the black market rate adjusts to eliminate any deviation from long-run PPP. Finally, stability tests proposed by Hansen and Johansen [Hansen, H., & Johansen, S. (1993). Recursive estimation in cointegrated VAR-models. Working Paper, University of Copenhagen, Institute of Mathematical Statistics; Econometrics J. 2 (1999) 306] are applied and it is shown that the dimension

**This paper has benefited from comments by seminar participants at Athens University of Economics and Business, University of Crete and University of Essex. We would also like to thank without implicating Richard Baillie, Anindya Banerjee, Dimitris Georgoutsos, Katarina Juselius, George Kouretas, Kate Phylaktis, and Aris Spanos for many helpful comments and discussions. I am also grateful to two anonymous referees for their constructive comments.**

E-mail address: ieba@internet.gr (P.F. Diamandis).
of the cointegration space is sample dependent while the estimated coefficients do not exhibit instability in recursive estimations.

© 2002 Elsevier Science Inc. All rights reserved.

JEL classification: F31; F33
Keywords: Cointegration; I(2) analysis; Purchasing power parity; Black market exchange rate; Identification; Stability

1. Introduction

The existence of parallel or ‘black’ markets, particularly for U.S. dollars, is a well-known feature of many developing countries and countries where trade and capital control exist. Foreign exchange and trade controls are a major factor in the ‘parallel’ or ‘black’ market for foreign currency. When access to the official foreign exchange market is limited, then those who need foreign exchange in order to make international transactions of goods, services, and assets will have an incentive to find an alternative source. Thus, the development of excess demand for foreign currency at the official rate gives an incentive to those who have an excess supply of foreign currency to sell it illegally at a price higher than the official rate. Thus, the existence of exchange rate controls causes a divergence between the equilibrium rate and the official rate and this leads to the emergence of a parallel or ‘black’ market for foreign exchange in the country.

The size of this market varies from country to country and depends on the type of exchange and trade restrictions imposed and the degree to which these restrictions are enforced by the authorities (see Edwards, 1989; Montiel, Agenor, & Ul Haque, 1993). Recent evidence suggests that black markets have increased in size and sophistication in many countries, in relation to capital movements. As a result, over the last two decades, a substantial body of literature has been developed on the issue of modelling and the macroeconomic implications of parallel markets for foreign currency [Agenor (1992), Gupta (1981), Kiguel and O’Connell (1995), and Phylaktis (1996) among others provide an extensive theoretical and empirical analysis of these markets as well as of the determinants of the black market premia in a variety of countries].

An interesting issue arising from the existence of these markets relates to the possible link of the parallel market exchange rate and the domestic and foreign price level. In other words, in the presence of a substantial black market for foreign currency, should we use the official (administratively set) exchange rate or the freely determined black market rate when we test for the validity of the purchasing power parity (PPP) theory of exchange rate? Recent studies by Baghestani (1997), Bahmani-Oskooee (1993), Kouretas and Zarangas (in press), and Phylaktis and Kassimatis (1994) have tested the long-run validity of PPP in the presence of a black market for the Iranian rial, several Pacific Basin currencies, the Indian rupee, and the Greek drachma, respectively, have shown that PPP performs better when the black market exchange rate is used, as opposed to the less favourable results of Cheung and Lai (1993), MacDonald (1993), and Taylor (1988).
دریافت فوری متن کامل مقاله

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