



ELSEVIER

Available online at www.sciencedirect.com

SCIENCE @ DIRECT®

Int. Fin. Markets, Inst. and Money 15 (2005) 21–38

Journal of
INTERNATIONAL
FINANCIAL
MARKETS,
INSTITUTIONS
& MONEY

www.elsevier.com/locate/econbase

Real or monetary? The US/UK real exchange rate, 1921–2002

Angelos Kanas*

*Department of Economics, University of Crete, 74100 Rethymnon, Crete, Greece
Regional Analysis Division, Institute of Applied and Computational Mathematics,
FORTH, Heraklion, Crete, Greece*

Received 1 June 2003; accepted 31 January 2004

Available online 28 July 2004

Abstract

This paper investigates the empirical link between the real exchange rate and the real interest differential, and the real exchange rate and the real output differential for the UK and the US. We use an extended set of monthly data for the period 1921–2002, which ensures high power of statistical tests, and a vector autoregression which allows for regime switches. In contrast to previous studies, we find evidence of both, a dynamic and a contemporaneous link between real exchange rate changes and the real interest rate differential. The real output differential is not linked with real exchange rate changes. The response of the real exchange rate to real interest differential shocks is much more persistent than its response to a real output differential shock. The results suggest that the real interest rate differential should receive further attention in building real exchange rate models.

© 2004 Elsevier B.V. All rights reserved.

JEL classification: F30; F41

Keywords: Real exchange rate; Regime switching; Real interest differential; Real output differential

1. Introduction

This paper investigates the role of the real interest differential and the real output differential in explaining the US/UK real exchange rate. Using an extended data set of monthly observations for the 1921–2002 period, which ensures high power of statistical tests, and

* Tel.: +30 28310 77427; fax: +30 28310 77406.

E-mail address: a-kanas@econ.soc.uoc.gr (A. Kanas).

covers periods of both fixed and floating nominal exchange rate regimes, we seek to explore whether there is a link between the real exchange rate, and the real interest and real output differentials. The primary motivation for addressing this question arises from the conflict between theoretical literature on real exchange rate dynamics and the related empirical evidence. Whilst a theoretical link between these two variables is predicted by popular exchange rate models (Beaudry and Devereux, 1995; Chari et al., 1996; Dornbusch, 1976; Frenkel, 1976; Obstfeld and Rogoff, 1995), empirical work has failed to uncover such a link (Campbell and Clarida, 1987; Clarida and Gali, 1994; Meese and Rogoff, 1988). The second motivation arises from the suggestion by several authors (Clarida and Gali, 1994; Meltzer, 1993) that real output may explain real exchange rate movements. It is not clear, however, whether the low variability of output can capture the high real exchange rate variability. The third motivation is for policy making: if real (i.e. output driven) shocks are more important than monetary (i.e. interest rate driven) shocks, then a floating exchange rate system is preferable to fixed rates.

Our major findings are as follows. First, lagged real interest differentials do affect real exchange rate changes in periods characterized by high volatility. These periods roughly coincide with periods of floating nominal exchange rates. In contrast, lagged real output differentials do not affect real exchange rate changes in either high or low volatility periods. Second, we find that the contemporaneous correlation between the real exchange rate and the real interest differential is variability-regime dependent. During periods of low variability, the correlation is much higher than in periods of high variability. In periods of high variability, the correlation is very low. This finding is important because it provides a compromise between Campbell and Clarida (1987), Clarida and Gali (1994), and Meese and Rogoff (1988), who found no correlation between the two variables during the recent float, and the theories of real exchange rate, which predict a strong link between the two variables. Furthermore, in contrast to Baxter (1994), we find evidence of high correlation between the two variables during low variability periods, on the basis of the first-difference of the real exchange rate. The contemporaneous correlation between real exchange rate changes and real output differential is very low in both regimes, suggesting a weak contemporaneous relation between these variables. Third, using a vector autoregressive model which allows for regime switching, we find evidence of Granger causality from lagged real interest differentials to real exchange rates changes, and no Granger causality from real output differentials to real exchange rates changes. These findings suggest that both the contemporaneous and the dynamic effects of the real interest differential are more important than the effect of the real output differential. Fourth, the short-run dynamic responses of the real exchange rate to real interest differential and real output differential suggest that a shock from the real interest differential is more persistent than a shock from real output. Our results suggest that the real interest differential is more important than real output in explaining the US/UK real exchange rate.

The structure of the paper is as follows: The next section outlines the links between the real exchange rate and the real interest differential, and the real exchange rate and the real output differential. Section 3 describes the data. Section 4 outlines the methodology. Section 5 discusses the empirical findings, and Section 6 concludes.

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