

# Nonlinear Mean-Reversion in Real Exchange Rates: Toward a Solution To the Purchasing Power Parity Puzzles

Mark P. Taylor, David A. Peel, Lucio Sarno

First published: 23 December 2001

<https://doi.org/10.1111/1468-2354.00144>

## Abstract

We fit nonlinearly mean-reverting models to real dollar exchange rates over the post-Bretton Woods period, consistent with a theoretical literature on transactions costs in international arbitrage. The half lives of real exchange rate shocks, calculated through Monte Carlo integration, imply faster adjustment speeds than hitherto recorded. Monte Carlo simulations reconcile our results with the large empirical literature on unit roots in real exchange rates by showing that when the real exchange rate is nonlinearly mean reverting, standard univariate unit root tests have low power, while multivariate tests have much higher power to reject a false null hypothesis.

## Citing Literature



[Download PDF](#)

## ABOUT WILEY ONLINE LIBRARY

This website utilizes technologies such as cookies to enable essential site functionality, as well as for analytics, personalization, and targeted advertising. You may change your settings at any time or accept the default settings. You may close this banner to continue with only essential cookies. [Privacy Policy](#)

[Manage Preferences](#)

[Accept All](#)

[Reject Non-Essential](#)

## OPPORTUNITIES

Subscription Agents  
Advertisers & Corporate Partners

## CONNECT WITH WILEY

The Wiley Network  
Wiley Press Room

Copyright © 1999-2026 John Wiley & Sons, Inc or related companies. All rights reserved, including rights for text and data mining and training of artificial intelligence technologies or similar technologies.

**WILEY**

This website utilizes technologies such as cookies to enable essential site functionality, as well as for analytics, personalization, and targeted advertising. You may change your settings at any time or accept the default settings. You may close this banner to continue with only essential cookies. [Privacy Policy](#)

[Manage Preferences](#)

[Accept All](#)

[Reject Non-Essential](#)