Available online at www.sciencedirect.com

SCIENCE DIRECT®

Journal of International Money and Finance
24 (2005) 982–1011

Journal of International Money and Finance

www.elsevier.com/locate/econbase

Foreign exchange market intervention and expectations: The yen/dollar exchange rate

Gabriele Galati [a,*], William Melick [b], Marian Micu [a]

[a] Monetary and Economic Department, Bank for International Settlements, CH-4002 Basel, Switzerland
[b] Department of Economics, Kenyon College, 306 Ascension Hall, Gambier, OH 43022, United States

Abstract

Using press reports and official statistics on central bank intervention in conjunction with options market data, we find that central bank intervention had no statistically significant systematic impact on the mean or higher moments of the exchange rate during 1993–2000. We also find that Japanese authorities appeared to intervene mainly in response to deviations of the exchange rate from some implicit target levels and to a rise in market uncertainty. U.S. monetary authorities intervened only in cooperation with the Japanese authorities.
© 2005 Published by Elsevier Ltd.

JEL classification: C22; E41; F31

Keywords: Exchange rates; Central bank intervention and reaction functions; Probability density functions

1. Introduction

This paper presents empirical evidence on the relationship between central bank intervention and market expectations of the daily yen/dollar exchange rate. Over the past years, a number of studies have analyzed the effect of intervention on the

* Corresponding author. Tel.: +41 61 280 8923; fax: +41 61 280 9100.
E-mail address: gabriele.galati@bis.org (G. Galati).

0261-5606/$ - see front matter © 2005 Published by Elsevier Ltd.
doi:10.1016/j.jimonfin.2005.07.004

exchange rate level as well as on the instantaneous and expected volatility of the exchange rate of the yen/dollar, the mark/dollar and other exchange rates. The results are generally mixed and depend on both the sample period being investigated and the intervention strategies being used.

This paper provides further evidence on this issue in four ways. First, it focuses not only on the expected level and variance of the exchange rate, but on the entire distribution of expected exchange rates, which is derived from option prices. The moments of this distribution allow a more complete characterization of market sentiment. Second, this paper uses two new data sets on intervention episodes. One data set covers actual intervention episodes and was recently provided by the Japanese Ministry of Finance through its website. The other data set contains interventions perceived by market participants and is based on Reuters reports. This second data set is more comprehensive than the data sets based on newspaper articles that have been used in the literature. Third, this paper uses a comprehensive data set of ‘‘news’’ about macroeconomic variables that helps to distinguish the effect of intervention from that of the arrival of other relevant information. Finally, the paper also looks at two directions of causality in the relationship between intervention and market expectations. We first examine the reaction function of monetary authorities and estimate how changes in the moments of the expected distribution of future exchange rates affect the likelihood of central bank intervention. We then investigate the effect of intervention on the moments, taking account of the fact that intervention and market expectations are determined simultaneously.

Our analysis is conducted over the period from September 20, 1993 to April 30, 2000.[1] Our results suggest that during the period of dollar weakness between 1993 and 1996, the Bank of Japan seems to have responded to deviations of the spot exchange rate from what traders perceived as implicit target ranges. It also appears to have intervened on average as a response to a rise in market uncertainty, consistent with statements made by central banks in the past that emphasized their attempt to ‘‘calm disorderly markets’’. We find evidence that between 1997 and 2000, the Bank of Japan seems to have intervened mainly following a rise in uncertainty. During the whole sample period, the Federal Reserve intervened always in conjunction with the Bank of Japan.

Consistent with some of the findings in the literature, our regression analysis suggests that, on average, intervention in the yen/dollar market had no statistically significant effect on the mean of the PDF during the period under review. We also find that, between September 1993 and April 2000, central bank intervention directed at the yen/dollar exchange rate was not associated with a significantly higher variance of expected future spot rates. This result indicates that, on average, central bank intervention was not followed by an increase in uncertainty in the market about future exchange rate movements. Consistent with our results for the mean, we find that, on average, intervention did not have a significant effect on the skewness.

[1] The start of the sample period is dictated by the availability of option data necessary to estimate the PDFs.

دریافت فوری ← متن کامل مقاله

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