Applied Financial Economics ›
Volume 17, 2007 - Issue 7

Original Articles

Are implied volatilities more informative? The Brazilian real exchange rate case

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Pages 569-576 | Published online: 24 Apr 2007

Cite this article https://doi.org/10.1080/09603100600706758

Abstract

This article examines the relation between dollar–real exchange rate volatility implied in option prices and subsequent realized volatility. It investigates whether implied volatiliti option that is not pr M] estimati implied volatiliti eralized Autoregr verage predi to that conta

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Acknow

The authors wish to thanks the comments from an anonymous reviewer and the editor Mark Taylor for comments and suggestions that have improved the article. Benjamin M. Tabak gratefully acknowledges financial support from CNPQ foundation. The opinions expressed in this article are those of the authors and do not necessarily represent those of the Central Bank of Brazil.

Notes

[1] Jorion (1995), Xu and Taylor (1995), Taylor and Xu (1997), Christensen and Prabhala (1998), Fleming (1998) and Blair et al . (2001).

[2] However, their results depend on the symmetry hypothesis of the loss function used to evaluate forecasts.

[3] There was a major change of regime in January 1999, when Brazil moved from a quasi-fixed to a floating exchange rate. Before February 1999, the dollar-real options market was very illiquid and restricted to deep out-of-the-money calls.

[4] To the best of our knowledge the only paper that addresses this issue for the Brazilian exchange rate is Andrade and Tabak (2001). However, the authors only evaluate two years of data and do not take into account the nature of the options expiration cycle.

[5] The closest-to-the money call for each expiration date is the one whose strike price is nearer to the futures price maturing on the same date.

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same.

[9] This approach is also taken by Canina and Figlewski (1993), Jorion (1995), Amin and Ng (1997), Campa and Chang (1998), Christensen and Prabhala (1998) and Blair et al . (2001).

[10] Unit roots tests were done for all series and no evidence of nonstationarity was found for volatility measures.

[11] The R^2 provides a direct assessment of the variability in realized volatility that is explained by the estimates. It is considered a simple gauge of the degree of predictability in the volatility process and hence of the potential economic significance of the volatility forecasts.

[12] This approach of comparing multiple forecasts, often called ‘encompassing regression’, is discussed in Jorion (1995), Christensen and Prabhala (1998) and Campa and Chang (1998).

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Published online: 5 Dec 2022

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