SPRINGER LINK

<u></u> ■ Menu

O Search

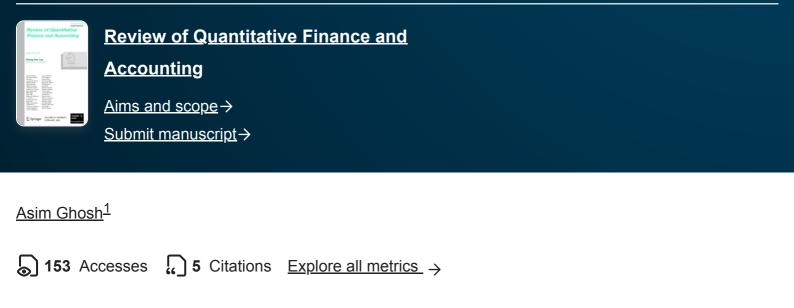
🔁 Cart

Home > Review of Quantitative Finance and Accounting > Article

Cross-hedging foreign currency risk: Empirical evidence from an error correction model

Published: May 1996

Volume 6, pages 223–231, (1996) Cite this article



Abstract

In this article, the traditional price change hedge ratio estimation method is extended by applying the theory of cointegration in the case of cross-hedging of spot exchange risk of the Belgian franc (BF), the Italian lira (IL), and the Dutch guilder (NG) with U.S. Dollar Index futures contracts. Previous studies ignore the last period's equilibrium error and short-run deviations. The findings of this study indicate that the hedge ratio estimated by the error correction method is superior to that obtained from the traditional method, as evidenced by the likelihood ratio test and out-of-sample forecasts. Hedgers will be able to control the risk of their portfolios more effectively at a lower cost.



Access this article
Log in via an institution \rightarrow
Buy article PDF 39,95 €
Price includes VAT (Poland) Instant access to the full article PDF.
Rent this article via <u>DeepDyve</u>
Institutional subscriptions →

Similar content being viewed by others



References

Akaike, H., "A New Look at Statistical Model Identification." *IEEE Trans. Auto. Control* 19, 716–723, (1974).

Google Scholar

Baillie, R. and T.Bollerslev, "Common Stochastic Trends in a System of Exchange Rates." *Journal of Finance* 44, 167–181, (1989).

Google Scholar

Baillie, R. and T.Bollerslev, "Cointegration, Fractional Cointegration, and Exchange Rate Dynamics." *Journal of Finance* 49, 737–745, (1994).

Google Scholar

Benet, B., "Commodity Futures Cross-Hedging of Foreign Exchange Exposure." *Journal of Futures Markets* 10, 287–306, (1990).

Google Scholar

Benet, B., "Hedge period Length and Ex-Ante Futures hedging Effectiveness: The Case of Foreign Exchange Risk Cross Hedges." *Journal of Futures markets* 12, 163–175, (1992).

Google Scholar

Braga, F., L.Martin, and K.Meilke, "Cross-Hedging the Italian Lira/U.S. Dollar Exchange Rate with Deutsch Mark Futures." *Journal of Futures Markets* 9, 87– 100, (1989).

Google Scholar

Brown, S., "A Reformulation of the Portfolio model of Hedging." *American Journal* of Agricultural Economics 67, 508–572, (1985).

Google Scholar

Davidson, R. and J.MacKinnon, *Estimation and Inference in Econometrics*. New york: Oxford University Press, 1993.

Google Scholar

Dickey, D. and W.Fullter, "The Likelihood Ratio Statistics for Autoregressive Time Series with a Unit Root." *Econometrica* 49, 1057–1072, (1981).

Google Scholar

Diebold, F., J.Gardeazabel, and K.Yilenarz. "On Cointegration and Exchange Rate Dynamics." *Journal of Finance* 49, 727–735, (1994).

Google Scholar

Eaker, M. and D. Grant, "Cross-Hedging Foreign Currency Risk." *Journal of International Money and Finance*, 85–105, (1987).

Ederington, L., "The Hedging Performance of the New Futures Markets." *Journal of Finance* 34, 157–170, (1979).

Google Scholar

Engle, R. and C.Granger, "Cointegration and error Correction Representation, Estimation, and Testing." *Econometrica* 55, 251–276, (1987).

Google Scholar

Ghosh, A., "The Hedging Effectiveness of Foreign Currency Futures: Empirical Evidence from an Error Correction Model." *The Journal of Multinational Financial Management* 5, 53–63, (1995).

Google Scholar

Granger, C., "Some Properties of Time Series Data in Econometric Model Specification." *Journal of Econometrics* 16, 121–130, (1981).

Google Scholar

Granger, C. and P. Newbold, "Spurious Regressions in Econometrics." *Journal of Econometrics*, 111–120, (1974).

Hill, J. and T.Schneeweis, "The Hedging Effectiveness of Foreign Currency Futures." *Journal of Financial Reearch* 5, 95–104, (1982).

Google Scholar

Johnson, L., "The Theory of Hedging and Speculation in Commodity Futures." *Review of Economic Studies* 27, 139–151, (1960).

Google Scholar

MacKinnon, J., "Critical Values for Cointegration Tests." In R. Engle and C. Granger, eds., *Long-Run Economic Relationships Readings in Cointegration*. New York: Oxford University Press.

Phillips, P. and P.Perron, "Testing for a Unit Root in Time Series Regression." *Biometrika* 75, 335–346, (1988).

Google Scholar

Stein, J., "The Simultaneous Determination of Spot and Futures Prices." *American Economic Review* 51, 1012–1025, (1961).

Google Scholar

Wilson, William W., "Hedging Effectiveness of U.S. Wheat Futures Markets." *Review of Research in Futures Markets* 3, 64–67, (1983).

Google Scholar

Witt, H., T.Schroeder, and M.Hayenga, "Comparison of Analytical Approaches for Estimating Hedge Ratios for Agricultural Commodities." *Journal of Futures* Markers 7, 135-146, (1987).

Google Scholar

Working, H., 'Futures Trading and Hedging." *American Economic Review* 43, 314–343, (1953).

Google Scholar

Working, H., "New Concepts Concerning Futures Markets and Prices." *American Economic Review* 52, 432–459, (1962).

Google Scholar

Author information

Authors and Affiliations

Department of Finance, Saint Joseph's University, 19131, Philadelphia, PA, USA

Asim Ghosh

Rights and permissions

Reprints and permissions

About this article

Cite this article

Ghosh, A. Cross-hedging foreign currency risk: Empirical evidence from an error correction model. *Rev Quant Finan Acc* **6**, 223–231 (1996). https://doi.org/10.1007/BF00245181

Issue Date May 1996 _ _ .

https://doi.org/10.1007/BF00245181

Key words cross-hedging exchange rate risk optional hedge ratio

Search

Search by keyword or author

Navigation

Find a journal

Publish with us

Track your research