## When the Goal is *not* to affect Prices: Foreign Central Bank Activities in U.S. Futures Markets

Raymond P. H. Fishe Michel A. Robe and Aaron D. Smith\*

First draft: April 2011; This draft: August 2012

## ABSTRACT

We utilize a comprehensive dataset of positions in U.S. futures markets to analyze the activities of 31 foreign Central Banks. Our goal is to investigate whether foreign Central Bank futures positions are consistent with coordinated policy, targeted hedging, or informed profit-making activities. We document that Central Bank positions generally account for a small fraction of the overall size of U.S. futures markets. Hence, there is no reason to believe that the goal is to influence U.S. interest rates. We provide evidence that Central Banks' positions are consistent with hedging some underlying balance sheet exposure, but for certain banks in some instruments the pattern is consistent with an attempt to enhance returns on foreign reserve assets. These inferences complement those from the public information on Central Banks' derivative use, mostly found in annual reports. We also examine whether Central Banks' positions are synchronized, such that they are affected by common shocks or coordinated policy actions. We identify differences in hedging and synchronization of many Central Banks' positions before and after the onset of the 2007-09 financial market turmoil. Specifically, Central Banks closely tied to Europe became significantly more synchronized in their trading during the crisis period, while non-European Central Banks maintained more independence. Lastly, we find that Central Banks profited from certain directional positions in T-Note futures.

**Keywords:** Central Banks, Interest-rate Derivatives, Hedging, Financial Crisis,

Synchronized Trading

*JEL classification:* E58, G11, G01

\*Fishe (corresponding author): U.S. Commodity Futures Trading Commission (CFTC) and Department of Finance, Robins School of Business, University of Richmond, Richmond, VA 23173. Tel: (+1) 804-287-1269. Email: <a href="mailto:pfishe@richmond.edu">pfishe@richmond.edu</a>. Robe: CFTC and Department of Finance, Kogod School of Business, American University, Washington, D.C. 20016. Tel: (+1) 202-885-1880. Email: <a href="mailto:mrobe@american.edu">mrobe@american.edu</a>. Smith: CFTC and Department of Agricultural and Resource Economics, University of California at Davis, Davis, CA 95616. Email: <a href="mailto:adsmith@ucdavis.edu">adsmith@ucdavis.edu</a>. Tel: (+1) 530-752-2138. We thank a number of individuals including senior officials at several Foreign Central Banks offered helpful discussions; participants at a CFTC seminar, for useful remarks; Karl Habermeier and his staff at the International Monetary Fund (IMF), for providing comprehensive time series of de facto foreign exchange regimes; Toby Kearn and Yang Liu, for helping summarize the public data; and Casey Petroff, for outstanding research assistance. This paper reflects the opinions of its authors only, and not those of the CFTC, the Commissioners, or other staff at the CFTC. All errors and omissions, if any, are the authors' sole responsibility.