## The effectiveness of foreign exchange interventions in Japan

Opale Guyot, Heather Montgomery<sup>1</sup>, Dachen Sheng

## Abstract:

This study informs the academic and policy debate on the policy effectiveness of exchange rate interventions on exchange rate levels and volatility. Using a constructed data set comprising daily data on exchange rates, monetary policy fundamentals, exchange rate intervention dates and magnitudes of those interventions as well as financial news speculation of such interventions, we empirically estimate the policy effectiveness of Bank of Japan interventions in the exchange rate over the twelve-year period between 2010 and 2022. This allows us to investigate the policy effectiveness of a variety of exchange rate interventions, or news of exchange rate interventions, across different time-horizons. We find that policy interventions in the yen exchange rate are more effective over short-horizons than long-horizons, more effective when the policy objective is a competitive devaluation of the yen rather than a revaluation, and more effective at influencing the level of the yen against major world currencies other than the U.S. dollar. In fact, for the yen-dollar rate we find that policy interventions may have the unintended consequences of weakening the yen (when the policy intention is to strengthen it) and increasing volatility in the yen-dollar exchange rate.

Keywords: foreign exchange intervention; exchange rates; volatility; GARCH

<sup>&</sup>lt;sup>1</sup> Corresponding Author: International Christian University, Department of Business & Economics,

<sup>3-10-2,</sup> Osawa, Mitaka, Tokyo, Japan montgomery[at mark]icu.ac.jp