Report Type

End of Award Report

Full Name

David Chambers and Jason Chen (now University of Essex)

Your E-Mail Address

adc53@cam.ac.uk

Faculty/Department

JBS

Project Title

• A long-run perspective on foreign exchange market liquidity

Project Start Date

Jul 31, 2015

Project End Date

Jun 30, 2017

Project Abstract

We study the determinants of bid-ask spreads in the foreign exchange markets. The market microstructure literature argues that bid-ask spread arises due to dealing costs, inventory costs, and adverse selection. However, the literature has struggled to come up with an empirical strategy to identify the three determinants of the bid-ask spread as the measurement requires some inputs that are either non-observable or difficult to quantify. We adopt a novel alternative approach to the estimation of the main components of bid-ask spread in the foreign exchange market, by exploiting the variation in exchange rate regime. For example, in a (credible) fixed regime, bid-ask spreads are solely driven by dealing costs as market makers do not face inventory risk or information asymmetry.

Activities and Achievement

We expanded our dataset to maximize the coverage and continuity. Specifically, we collected daily spot bid and ask rates from the Financial Times for 1976-1990 for currencies unavailable from WM/Reuters for this period. We also collected daily bid and ask quotes for spot and forward rates from the Manchester Guardian for 1922-1924. Furthermore, we completed our dataset using spot and forward rates from other sources (BBI, Enzig, Keynes, Nelson Mark's webpage). Our main dataset now covers 19 developed country currencies from 1919-2016, and consists of 424,021 observations in the daily dataset and 13,879 currency-month observations in the monthly dataset (where there is no missing swap data). Using the methodology in our working paper "Currency regime and the Carry Trade" to classify exchange rate regimes, we show that foreign exchange market liquidity displays substantial variation across time and currencies and this variation is related to currency regimes. Our preliminary results for the difference in liquidity between the fixed regime and the floating regime suggest that the compensation for inventory costs and information

asymmetry is an important factor driving foreign exchange trading costs.

Our next step is to distinguish between inventory costs and information asymmetry using capital controls as an instrument. A major challenge is that while available sources (e.g. Reinhart and Rogoff) provide the start dates for capital controls, it is often unclear when they are removed. We are now constructing capital control indicators manually using various historical documents. Once this is complete and the empirical decomposition of FX liquidity becomes feasible, we will examine the relationship between different components of FX liquidity and currency returns, in a liquidity risk framework such as Acharya and Pedersen (2005, JFE).

Dissemination

Now that we have finished cleaning the new data set and conducted preliminary empirical analysis on the properties of foreign exchange market liquidity, we are are beginning a first draft of a working paper which includes empirically decomposing FX liquidity into factors driven by dealing costs, inventory costs, and information asymmetry, and then documenting the relationship between foreign exchange market liquidity and currency returns.

Outputs

The collection of bid-ask data under this project has contributed to our first working paper "Currency regime and the Carry Trade" which has already been presented at Infiniti Conference, the European Economics Association Conference and accepted at the China International Finance Conference, the Northern Finance Association Meeting and the AEA 2018 Meeting

Major Difficulties and Any Other Issues

None

Web Links

None