Report Type

Mid Term Award Report

Full Name

David Chambers and Jason Cen

Your E-Mail Address

adc53@cam.ac.uk

Faculty/Department

finance and accounting

**Project Title** 

• Currency regimes, market microstructure and the currency risk premium Project Abstract

First, we study the currency risk premium over the long-run and the impact of regime changes on the returns to currency speculation. The asset pricing literature has centered on understanding expected return or risk premium. However, the existing literature is lacking a long-run perspective on currency risk and return and on the impact of monetary regime changes. Existing research on currencies typically focuses on the post-Bretton Woods floating period from 1983. Examining the impact of monetary regime shifts on currency returns therefore offers academics and practitioners a new perspective on the risk-return tradeoff in currency speculation.

Second, 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 three components of bid-ask spread in the foreign exchange market, exploiting the implications of exchange rate regimes. 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

- 1. 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).
- 2. We have clarified the implementation of currency trading strategies (carry and momentum for now initially, but we may add the value strategy later) using spot exchange and FX swaps. We then examined the long run profitability of currency trading strategies. Finally, we estimated transaction costs by carefully taking into account portfolio rebalancing in spot and swap markets.
- 3. We have defined exchange rate regimes using two alternative approaches. The first approach is to indicate regime using existing sources (e.g., League of Nations, Reinhart & Rogoff, Crafts & Fearon, etc.). The second approach exploits the statistical restriction that when two currencies, i and j, are both pegged to the same anchor, the cross rates between i and j have zero variance. We will then examine the

impact of exchange rate regimes and regime changes on the returns and risks of currency trading strategies using regime-based decomposition of the relevant quantities.

## Dissemination

Much effort to date has gone into assembling and cleaning this new comprehensive data set. Now this is complete we can turn our attention to completing a first draft of a working paper.

## Outputs

Much effort to date has gone into assembling and cleaning this new comprehensive data set. Now this is complete we can turn our attention to completing a first draft of a working paper.

Major Difficulties and Any Other Issues

None that remain outstanding

Web Links

None yet

Additional Information

Declaration

This award has not yet produced any relevant outputs, but details of any future publications will be submitted to the CERF database as soon as they become available.

Signature - Main Award Holder