University of Portsmouth Business School

Working Papers in Economics & Finance

2018-05

Spoofing and Pinging in Foreign Exchange Markets

Alexis Stenfors, University of Portsmouth

Masayuki Susai, Nagasaki University

Portsmouth Business School
http://www.port.ac.uk/portsmouth-business-school/

Spoofing and Pinging in
Foreign Exchange Markets

Alexis Stenfors** and Masayuki Susai*

13 September 2018

Abstract

This paper investigates the susceptibility of FX spot markets to limit order submission strategies that are either intended to create a false impression of the state of the market ('spoof orders') or to extract hidden information in the market ('ping orders'). Using a complete limit order book dataset from EBS, we study currency pairs that have mature algorithmic markets (EUR/USD and USD/JPY), as well as other G10 and emerging market currencies where EBS is used as a secondary electronic trading platform (EUR/SEK, USD/RUB and USD/TRY). Our results, indicating that EUR/USD and USD/JPY are highly sensitive to information-rich orders, suggests that spoofing tactics might be more dependent on the chosen electronic trading venue, rather than the overall market liquidity of the currency pairs. Furthermore, we find widespread adoption of pinging tactics in the EUR/SEK and USD/RUB markets.

JEL Classification Numbers: D4, F3

Keywords: market microstructure, limit order book, foreign exchange, high-frequency trading, manipulation, spoofing, pinging, stealth trading

**Alexis Stenfors (corresponding author), University of Portsmouth, Richmond Building, Portland Street, Portsmouth PO1 3DE, UK. Telephone: +44 (0)23 9284 4183. E-mail: alexis.stenfors@port.ac.uk
*Masayuki Susai, Nagasaki University, 4-2-1, Katafuchi, Nagasaki, 850-8506 Japan. Telephone: +81 (0)95 820 6356. E-mail: msusai@nagasaki-u.ac.jp