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# Forecasting exchange rate returns and transaction costs

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125.899 Thesis

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**Acknowledgment**

I would like to thank my supervisor, Dr Nuttawat Visaltanachoti for his helpful advice and comments regarding my research report.

## **Forecasting exchange rate returns and transaction costs**

### **Abstract**

Order flow in interdealer FX markets is driven by large banks, which are viewed as more informed (Bjønnes, Osler & Rime, 2011). Order flow is a key determinant of exchange rates and bid-ask spreads, because order flow conveys information that is assumed to be related to future exchange rate fundamentals. Thus, the impact of order flow on exchange rates is persistent at short to medium horizons regardless of the source of exchange rate fluctuation, because agents (i.e. dealers) rationally interpret the resulting exchange rate movement as information about future exchange rate fundamentals. The persistent impact of order flow on exchange rates and bid-ask spreads implies that order flow should provide forecasting power for both future exchange rates and future bid-ask spreads.

This also implies that order flow specification should improve returns, forecasting accuracy and performance stability under market volatility relative to naïve forecasting models. This is due to the order flow model being based on information about future exchange rate fundamentals, whereas naïve forecasting models are only based on information about either past or present information on exchange rate fundamentals.

This paper examines the forecasting ability of order flow for both future exchange rates and future bid-ask spreads, using 13 currency pairs that include the heavily traded Euro, the Great Britain pound and the Australian dollar. This paper then evaluates returns, forecasting accuracy and performance stability under market volatility by comparing the results of the order flow model with those of three alternative naïve forecasting models: (1) A buy-and-hold strategy; (2) a naïve random walk model; and (3) a moving average model. This paper shows that order flow has superior forecasting ability in terms of generating higher returns, lower bid-ask spreads, and producing more stable and less volatile performance. In addition, this paper also provides evidence of an intraday pattern of bid-ask spreads that suggests periods at which bid-ask spreads are narrower, during which trading costs can be minimised.