Spam, Scam & Ham in Twitter Forex trading signals

P. Kralj Novak¹, P. Gabrovšek², I. Mozetič¹. (1) Jožef Stefan Institute, Jamova 39, 1000 Ljubljana, Slovenia, petra.kralj.novak@ijs.si (2) Faculty of Computer and Information Science, University of Ljubljana, Večna pot 113, 1000 Ljubljana, Slovenia

Currency trading (Forex) is the largest world market in terms of volume. We analyzed trading and tweeting about the EUR-USD currency pair over a period of three years. First, a large number of tweets were manually labeled, and a Twitter stance classification model was constructed. We used the model to classify all the tweets by the trading stance signal: buy, hold, or sell (EUR vs. USD). The Twitter stance was compared to the actual currency rates by applying the event study methodology, well-known in financial economics. It turns out that there are large differences in Twitter stance distribution and potential trading returns between the four groups of Twitter users that we have identified: trading robots, spammers, trading companies, and individual traders (Figure 1).



Figure 1: Cumulative abnormal returns (CARs) for different user groups. The events are classified as `buy', `hold', or `sell' according to the cumulative Twitter stance in one hour after the event (vertical line). The event is announced at lag = 0. CARs are computed at one minute resolution, for up to one day (1440 minutes) after the event. Tweets by trading companies show potential for trading returns

Additionally, we have observed attempts of reputation manipulation by post festum removal of tweets with poor predictions, and deleting/reposting of identical tweets to increase the visibility without tainting one's Twitter timeline.

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