LIBOR MANIPULATION AND DETECTING INFORMED TRADING EVIDENCE FROM THE INTEREST RATE DERIVATIVES MARKET

Pongsutti Phuensane[1]

Julian Williams[2]

Abstract

One of the most striking evidences of the failure in financial regulation is represented by the London Interbank Offered Rate (LIBOR). Since May 2008, a huge scandal focusing on a possibility of criminal wrongdoing by a number of the most trusted international banks revealed manipulation of the benchmark interest rate known as the LIBOR. This scandal became as matter of fact on June 2012 when Barclays agreed to pay fines of $360 million and £144.5 for having rigged the LIBOR. This paper provides the crucial evidence of LIBOR manipulation including communication evidence between interest rate derivative traders and LIBOR submitters described in the CFTC and FSA documents. Also, we provide statistical evidence of LIBOR manipulation including LIBOR quotes and cross-sectional p-value correlation for banks' quote on the LIBOR submission. Furthermore, the paper applies Probability of Informed Trading or "PIN" with the LIBOR manipulation cases recorded in the regulatory reports. The objective of this empirical exercise is to examine the effectiveness of the PIN model from Easley et al. (1996) in actually detecting informed behavior around a LIBOR manipulation event. For this study, we use a data set of Eurodollar futures market as the pricing mechanism of the futures which is based on the LIBOR. to clearly understand why the Eurodollar futures is used as a data set to study the PIN around the LIBOR manipulation, this research provides the number of communication requested on LIBOR manipulation related to a number of currencies. From this evidence, it can be seen that the second most popular was the 3M-LIBOR which is the benched mark for the Eurodollar futures market. Additionally, we then compute the PIN around the maturity date as a normal event in the futures contract and investigate the variation of PIN around these events. Therefore, focused on a short period, the variation of PIN around LIBOR manipulation indicates that the PIN is a good early warning signal. However, the general long-run variation of the PIN was not statistically significant relative to both LIBOR manipulation and the maturity event.

Keywords: *Microstructure, Informed Trading, PIN, LIBOR Manipulation, Market Manipulation, Financial Economics, Law and Economics, Eurodollar*

---

[1] Ph.D., Major Finance, Khon Kaen Business School, Khon Kaen University. E-mail: pongphu@kku.ac.th.

[2] Ph.D.,Durham University Business School.