

Title: "Information Aggregation in the Libor Rate-Setting Process and the Effects of False Reporting"

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Abstract: We present an analytical model of Libor rate setting in which the Libor quote-setting process serves to aggregate bank-specific information on market-clearing interest rates. We use the model to analyze the impact on the Libor rate of false (and undetected) reporting by one or more banks intending to manipulate the Libor rate. We analyze the potential trading profits to interest rate derivatives traders aware of the false reporting, and the economic costs associated with the loss of Libor rate integrity after false reporting is publicly detected. We calibrate the model to observed Libor panel data and find with a functioning Libor system, the daily uncertainty (standard deviation) in the estimate of the true market-clearing rate is less than 4 basis points. In the autarky case (no Libor panel or a badly corrupted Libor panel) this increases to approximately 5.5 basis points. This rise in uncertainty from the loss of the Libor information aggregation process is our estimate of the economic cost of false Libor reporting.