

## Was the Forex Fixing Fixed?

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### *Abstract*

“Fixing” of the exchange rate (price) is a rule among the Forex market participating institutions to set a reference/settlement price for the day. Major fixings occur at 9:55 am Tokyo time for transactions between Japanese banks and their customers, and at 4:00 pm London time for transactions between European and US banks and their customers. The two fixings have different regulations and institutions. The London fix is calculated as a median price during the one minute window around 4:00 pm. We empirically examine the movement of prices around the time of fixing. Regulators in the UK and the US have accused banks for collusive behaviors to manipulating the price around the London fixing time. It has been mentioned in the media that there was evidence of “chats” among traders of different institutions for collusion. But, is there evidence in price behavior? We found little evidence of volatile movement (or spikes) in prices around the fixing time. In fact, liquidity provision at the fixing time is larger than other times, which makes the price impact of any trade smaller. At the Tokyo fixing, however, financial institutions can fix the price by themselves based on the market price. Although the market provides deep liquidity at the Tokyo fixing as well, such financial institutions had announced prices to be more favorable for banks up until 2008. Such deviation of the fixing price from the market price might be related to the settlement needs of importers, and banks wanting to reduce the risk of being caught in the dollar shortage later in the day.

**Keywords:** foreign exchange markets, fixing, WM/Reuters, Tokyo fixing, manipulation, front-running, collusion, efficient market, spikes

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