

# Transparency in a Dealership Market

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## Abstract

This paper examines a multiple-dealership market with different sets of transparency standards on net interdealer order flow. I will argue this issue with an application to foreign exchange markets. I show the following three results. First, accumulated profits for dealers in a multiple-dealership market differ depending on the different levels of transparency. In particular, the average of the accumulated profits of all dealers is higher as they acquire more of the post-trade information on the net interdealer order flow. As more information dealers obtain, the faster they can adjust their behavior to increase their profits. It implies that some form of policy regime on the post-trade transparency can possibly influence the profits of the dealers in a multiple-dealership market. Second, the difference in the profits will shrink as the market becomes more transparent. The more the market becomes transparent, more dealers know the post-trade information, which helps them to predict future prices. Then there is less chance for dealers, who have the post-trade information, to take information advantage and capture more profits than others. So, it will be harder for any dealers to be much richer than others.

The third result says that more transparent market improves the price management of dealers, but worsens their FX inventory management. As in actual FX markets, our dealers tend to eliminate unwanted FX inventory positions as soon as possible. Dealers with such positions are exposed to exchange rate uncertainty. If the rates go up (down), the foreign exchange unwanted losses (gains) its value. Dealers try to eliminate such uncertainty so quickly. It implies

that more position disturbance causes dealers to trade more FX next periods, which may increase buying or selling pressure in the market. Since we assume that there are financial customers in our market and the post-trade information is somehow available to such customers, higher buying or selling pressure provides more incentives for such customers to trade with dealers. In particular, they buy (sell) more assets from dealers next periods when they observe increases in demand (supply) pressure, which lead to push up (down) the future price. They buy (sell) now when they receive information on increases (decreases) in future prices. So, in our framework, customers tend to absorb the dealers' position disturbance. When dealers buy (sell) unexpected positive amount of an assets, customers buy (sell) from dealers next periods since customers expect the future price increases (decreases).

However, as order flow information becomes observable for dealers, they tend to push up (down) the quotes to deal with customers. They increase (decrease) the quotes when they receive high buying (selling) pressure. They set higher (lower) quotes since if dealers do not set higher (lower) quotes for customers now, they know that customers will buy (sell) now at the low (high) price and sell (buy) in the future when the actual price increases (decreases) so that dealers possibly lose. They adjust their quotes to prevent such possible future loss according to their information. Therefore, such a transparent market improves the price management of dealers. However, increasing (decreasing) the quotes for customers reduces incentives for customers to buy (sell) next periods. In other words, customers have less incentives to absorb dealers' risk from position disturbance.

Those three results in this paper provide possible explanations on why dealers in actual FX markets do not like fully transparent markets. As they have more post-trade information, they may quickly manage their quotes to prevent possible loss from dealing with informed customers. However, they will not be able to manage FX inventory well in such transparent markets. In addition, dealers may not prefer transparent markets since they would like to make much larger profits than others by taking informational advantage.

Currently, FX markets do not have any disclosure requirements so that the public normally do not observe most order-flow information. However, some order flow information is available when dealers choose brokered interdealer trades, which consist of about 20-40% of the total trades in the major trading centers (BIS (1996), The FX committee (2007)). Therefore, currently the level of transparency in FX markets is somehow determined by the dealers, and it seems dealers currently prefer to choose the middle of the complete transparency and non-

transparency because they trade directly with other dealers, which means non-transparent, and indirectly through brokers, which means more transparent. However, we are not sure the mechanism on why dealers choose such a transparency level. In addition, it is unclear whether the current low level of transparency of the multiple-dealership markets produces the highest profits for dealers. If the current transparency level hinders all dealers from gaining the possible profits, we can suggest that dealers may be currently making a wrong choice on transparency levels. This paper addresses these issues from dealers' viewpoint.

This paper focuses on the transparency of interdealer trades. Naik et al. (1999) also analyze the transparency issue but they examine the customer-dealer trade. Lyons (1996) deals with transparency of interdealer trades. He concludes that greater transparency can accelerate price formation but impede dealers' risk management so that dealers prefer incomplete transparency. Dealers in his market maximize their utility to make their strategies. However, dealers in our market are assumed to be boundedly rational in a sense that they just use simple rules of thumb to decide their strategies as advocated in Simon (1979).