

The Case for Mid-Market Rates in Over-the-Counter FX Transaction Cost Analysis

John B. Galanek¹

Do not distribute without the explicit consent of the author.

Abstract

This paper asserts that the mid-market price should be the benchmark data set against which transaction costs are measured in OTC currency markets. On average, market-making banks trade at the mid-market price. The cost in basis points between the transacted rate and the mid-market rate, multiplied by the volume of the empirical trade, provides a universally applicable cost benchmark in OTC foreign exchange.

September 2009

¹ John B. Galanek: Managing Partner, FX Transparency, LLC - e-mail: jgalanek@fxtransparency.com. Thanks to James McGeehan and Jakub Jurek.

Introduction

FX Transparency asserts that the buy-side's cost of transacting in the currency market is equal to the profit that a sell-side bank earns on the trade from its market-making operations. We contend that on average, the market-making banks trade at the mid-market rate, and hence earn the difference between the transacted rate and the mid-market rate, ignoring any proprietary risk-taking profits or losses.

The buy-side's cost is then simply the difference between the transacted rate and the mid-market rate in basis points multiplied by the volume of the transaction. Market-making banks do not charge a commission to trade FX. This is further evidence that they capture a good portion of the bid / ask spread to compensate themselves for the risk taken in providing liquidity.

The Mid-Market Rate

FX market participants cannot reach consensus on market volume. For more information on the lack of reliable market volume in OTC currencies, see our paper on Interval Time Average Price (ITAP).

FX market participants do, however, reach consensus around where the mid-market spot and forward rates (usually out to one year) are for most currencies.

For evidence of this, take a brief look at a typical market-making bank's electronic trading platform: The bank calculates the mid-market rate from EBS and/or Reuters Matching, then applies a bid/ask spread, and publishes these live, tradable prices to their clients. In other words, banks are *risking their own capital* based upon the mid-market rate.

Additionally, access to EBS and Reuters Matching has improved dramatically over the past several years. Buy-side participants now have the ability to view and trade on these formerly "bank-only" platforms through prime-brokerage credit. The investment community's access to interbank rates, with a high degree of transparency, is further support of the mid-market rate as a benchmark.

The mid-market spot rate can be moved along the forward curve using interpolation, provided one has an international business day calendar and good understanding of FX forward pricing, including day-count conventions. Using the forward market, investors can compare their execution rate to the mid-market rate that matches their settlement date.

On Average, Market-Making Banks Trade at the Mid-Market Rate

In the interbank market, crossing the bid / ask spread is a zero-sum game between the market makers, because every transaction has a passive participant, or price maker, and an active participant, or price taker.

It is reasonable to assume that the spot EURUSD trader at "Market-Making Bank A" and the spot EURUSD trader at "Market-Making Bank B" have roughly the same skill set, and therefore they are equally adept at getting the best market rate for their respective banks. They are compensated roughly the same for doing the same work, and traders in these positions frequently play musical chairs, moving from one bank to another to do the same job.

In the long run, half of the time the EURUSD trader at "Market-Making Bank A" trades on the passive side of the bid / ask spread, and half of the time he crosses bid / ask and trades on the active side of the spread. His counterpart at "Market-Making Bank B" has a similar experience over the long run. Hence, on average, sell-side traders transact at the mid-market rate.

Commissions in OTC Foreign Exchange

Although they are not yet common in currency space, commissions paid to agency trading² desks, electronic trading platforms, or prime brokers must also be included. Typically in FX, these costs are embedded in a transaction rate which is inclusive of commissions called a "dirty rate." If commissions are billed directly rather than embedded in the rate, as they are in equities, they need to be added to the transaction cost computation.

These explicit commissions typically occur only at buy-side firms attempting to access the interbank market directly. Buy-side firms do this in an attempt to deal at the mid-market rate themselves, hence reducing their total trading costs and improving execution.

The Cost Calculation

The cost in basis points between the transacted rate and the mid-market rate, multiplied by the volume of the empirical trade plus commissions, provides a universally applicable cost benchmark. Represented in equation form:

$$abs \left\{ \frac{(P_{trans} - P_{mid})}{P_{mid}} \times V_{trans} \right\} + commissions$$

This framework also captures any hard mark-up cost³, since it is embedded in the transacted rate.

Conclusion

Given the inherent issues surrounding volume in OTC foreign exchange markets, the mid-market rate provides a universally applicable cost benchmark. This is most aptly reflected in the prominence given to the mid-market rate by most market-making banks on their electronic trading platforms. Mid-market rates are readily available to most investors, and provide the optimal benchmark for those seeking to quantify transaction costs in OTC foreign exchange.

² Agency trading is the practice of outsourcing execution to a third party.

³ The salesperson's spread on top of the trader's risk-transfer price.