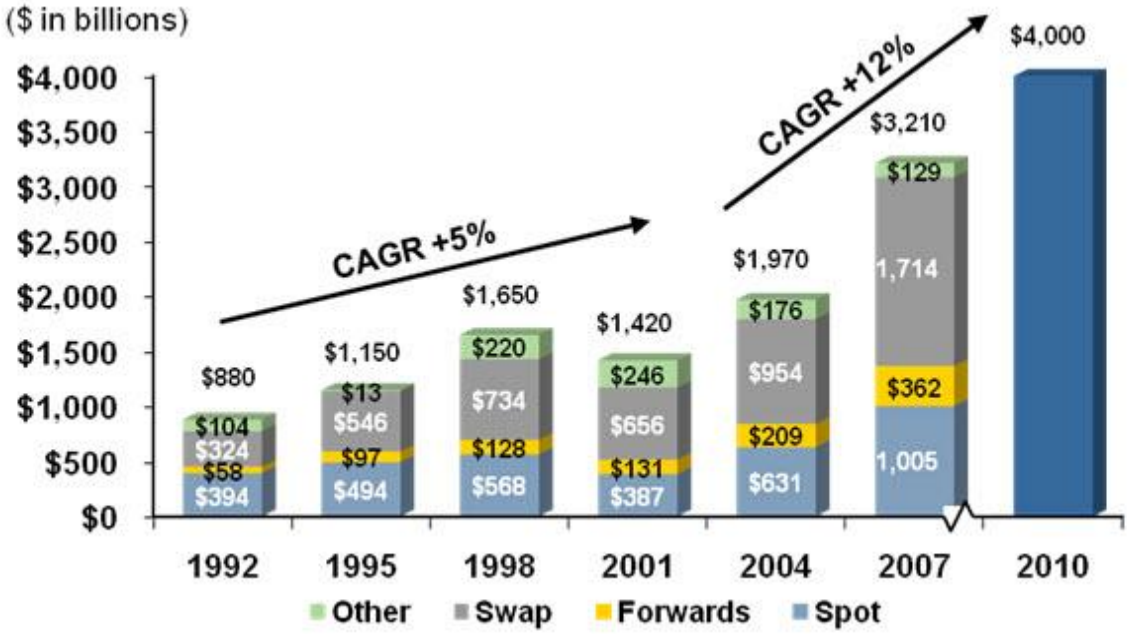
WHERE DO FX PRICES COME FROM?

By Alex Douglas

Despite turmoil in global financial markets in recent years and the launch of the Euro in 1999[1], growth in daily turnover in the foreign exchange market has accelerated significantly over the past decade. The latest figures[2] show that daily turnover in the global currency markets is now averaging an unparalleled level of US$4 trillion per day!



Thanks to advances in technology, participation in the foreign exchange market is no longer restricted to major banks, financial institutions and the super-rich. Retail traders can also now trade currencies with access to live streaming prices via online trading platforms, available 24 hours a day.

But where do these prices come from?

Many retail traders participating in the foreign exchange market have prior experience with exchange traded securities such as equities or futures. In these markets, all trades pass through a central exchange with settlement conducted by a clearing house. Because all trades in a given security pass through the exchange, it is clear for all market participants to see what the current bid price is and what the current asking price is, along with the last traded price, the high and low prices for the day and in many cases the volume and even open interest.

The foreign exchange market is different. It is what is known as an over the counter (OTC) market. In an OTC market there is no central exchange through which all trades must pass and be cleared. Instead, any two parties may deal directly with one another, on terms and at a price that they agree to between themselves. There is no central body that collects the details of such trades and no central clearing house to process the transactions. Accordingly, it is theoretically

possible for simultaneous trades to take place in a given security in the OTC market at slightly different prices.

In the foreign exchange market, the biggest players are major international banks and financial institutions. Collectively, these entities comprise the 'interbank' market. Many of them regularly trade hundreds of millions, even billions of dollars per day. It is the high volume of trading between these institutions that drives price movements in the foreign exchange market.

While many trades in the interbank market are executed directly between two counterparties, there are also a large proportion of trades that are executed through specialist interbank currency brokers. Up until the late 1990's, the majority of the FX brokers were 'voice brokers', staffed by people sitting around a desk quoting prices down dedicated telephone lines directly into the dealing rooms of their interbank clients. Although there are a number of these voice brokers still quoting currency prices down the line all day, electronic broking has taken a large slice of the market. The major players servicing the interbank market in this field are EBS (Electronic Broking Services) and Reuters.

One of the key roles of a currency broker is to aggregate the bids and offers (the 'ask') they receive from market participants. Through this process, the highest bid price and the lowest ask price are combined to become the two-way price (bid/ask) that the broker will quote to the market.

A bank that wants to buy USD/JPY will be inclined to quote slightly higher prices in the hope that somebody will 'hit' their bid. A bank that would prefer to sell USD/JPY is likely to quote slightly lower prices in the hope that somebody will 'lift' their offer (ask).

USD/JPY	Bid	Ask
Bank A	83.29	83.34
Bank B	83.30	83.35
Bank C	83.27	**83.32**
Bank D	83.29	83.35
Bank E	**83.31**	83.36
Bank F	83.30	83.35
Broker Price	83.31	83.32

In this example, an interbank broker receives bid and ask prices for USD/JPY from six separate banks. The highest bid is 83.31 from Bank E. The lowest ask is 83.32 from Bank C. The aggregated bid/ask price that the broker is then able to quote to participants in the interbank FX market for USD/JPY is 83.31/83.32. This 1-pip spread is considerably narrower than the 5 or 6-pip spread quoted by the individual banks in this example.

Retail traders often fail to appreciate that the price spreads they receive via their online platforms are tighter than the spreads they would be quoted if they were able to deal directly with one of the major FX trading banks.

Of course, there is more than one broker aggregating prices within the interbank FX market. Although this opens the door to the possibility that different

brokers could be simultaneously quoting differing prices for the same currency pair, the reality is that arbitrageurs will ensure that any difference in price remains very small. There is also potential that individual interbank participants dealing directly with each other could trade at a price that differs to the prevailing price quoted by brokers but again, any difference is likely to be relatively small.

Ultimately, it is the activity in the interbank market that guides the rates at which all FX transactions are executed – with the possible exception of black-market trades. Whether it is a major cross-border corporate transaction or a tourist withdrawing cash from a foreign ATM, the rate of exchange is determined by reference to the prevailing rates in the interbank FX market.

Each retail FX provider has their own conduit for receiving pricing information from the interbank FX market. Some use the services of wholesale liquidity providers and ECN's (Electronic Computer Networks) such as FXAll and Currenex. Others have direct relationships with one or more of the major FX trading banks. Some employ a mixture of both. Yet another group of retail FX providers simply make available to their clients the platform (and prices) of another FX provider through a White Label or Introducing Broker arrangement.

Each of these different avenues for collecting pricing information from the interbank FX market has the potential to result in slight variations in price for any given currency pair.

It is also important to understand what happens to these prices before they appear on a retail trading platform. The various pricing models employed by retail FX providers ('brokers') can essentially be broken down into three broad categories (within which there is wide variation). These are:

Raw spreads:

These providers pass raw prices straight through to clients. Although they grab headlines for having tight spreads, they make their money by charging a fee for trades executed on their platform - so the true 'cost' is greater than the quoted spread. In the case of many ECN's, the liquidity available is provided by the bids & offers of other traders within the network. As a result, the tight headline spreads may only be available on relatively small volume.

Floating spreads:

Providers that offer floating spreads generally take the raw prices they obtain from the interbank FX market and add a small margin to them before showing them to clients. Variations in the bid/ask spread with these providers is simply a dynamic reflection of changes to the spread within the underlying interbank market.

Fixed spreads

Other providers offer their clients fixed spreads. In order to allow for fluctuations in the underlying spreads received from the interbank market, fixed spreads are generally (but not always) a little wider than those offered under the floating spread model. Providers that offer the fixed spread model typically have a trading desk that manages positions, with traders deciding whether or not to hedge client positions.

With all these variations in the methods employed to establish rates on different retail FX trading platforms, it is hardly surprising that there can be small differences in the price of any given currency pair at any given point in time.

Potentially, this can result in orders at a certain price level being hit on one platform, while on another platform the same level is not touched. This does not reflect price manipulation by FX providers; it is simply a function of the way prices are determined.

NOTES:
[1] The Euro (EUR / €) officially came into existence in a non-physical form on 1st January 1999, although it wasn't until Monday, 4th January 1999 that trading in the new currency actually began. Euro notes and coins were first issued on 1st January 2002.
[2] The Bank for International Settlements conducted its most recent 'Triennial Central Bank Survey' in April 2010 and released the results in September 2010.